



Puerto Rico Economic Analysis Report

2015-2016

**Commonwealth of Puerto Rico
Department of Labor and Human Resources
Bureau of Labor Statistics**

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I. Population

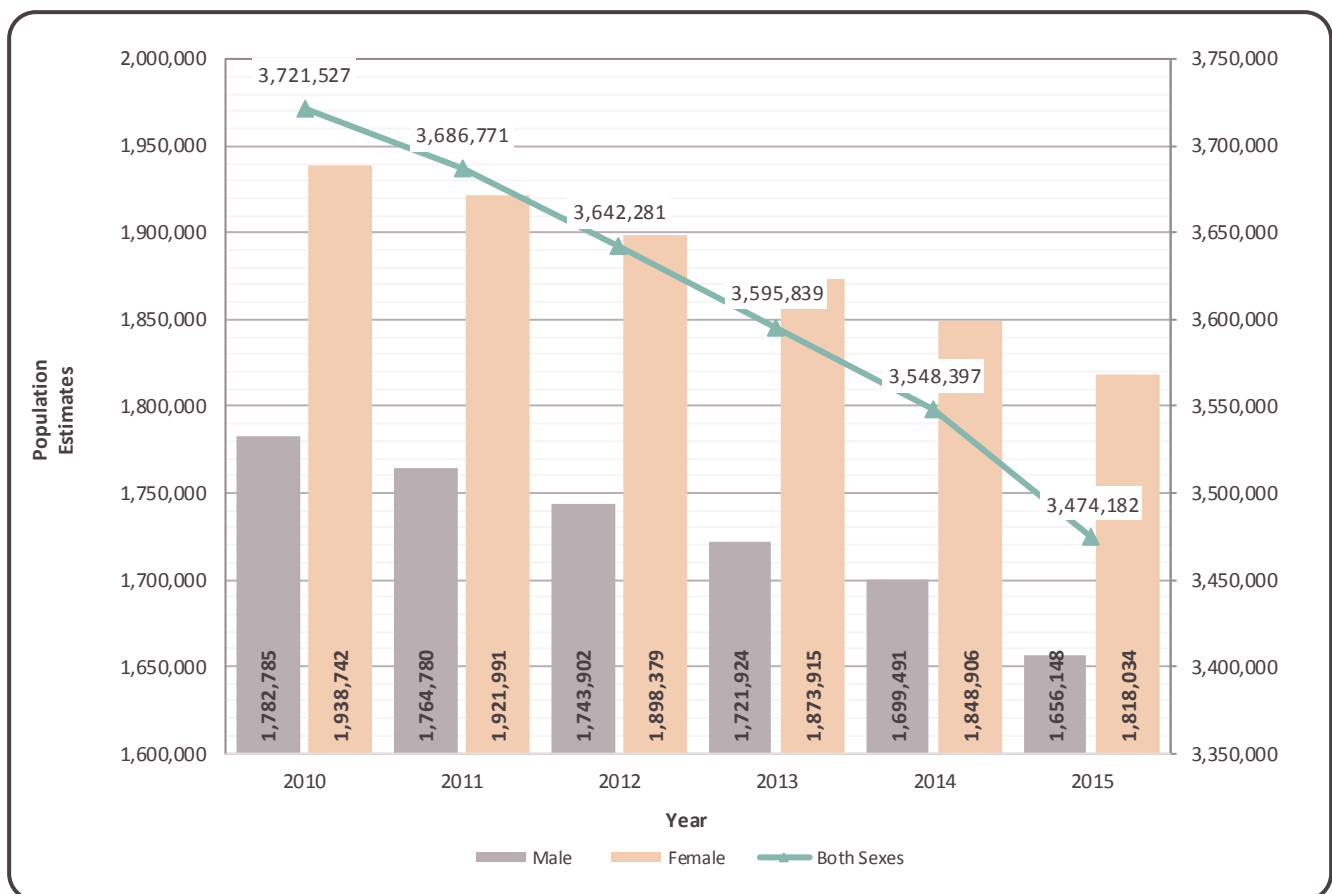
A. Demographics

According to the statistics presented by the U.S. Census Bureau, Population Division, the population of Puerto Rico continues its downward trend since the 2010-2015 period. The decreased in the estimated population from 2010 to 2015 shows a reduction of 247,345 persons or -6.6%.

B. Population by Age and Sex

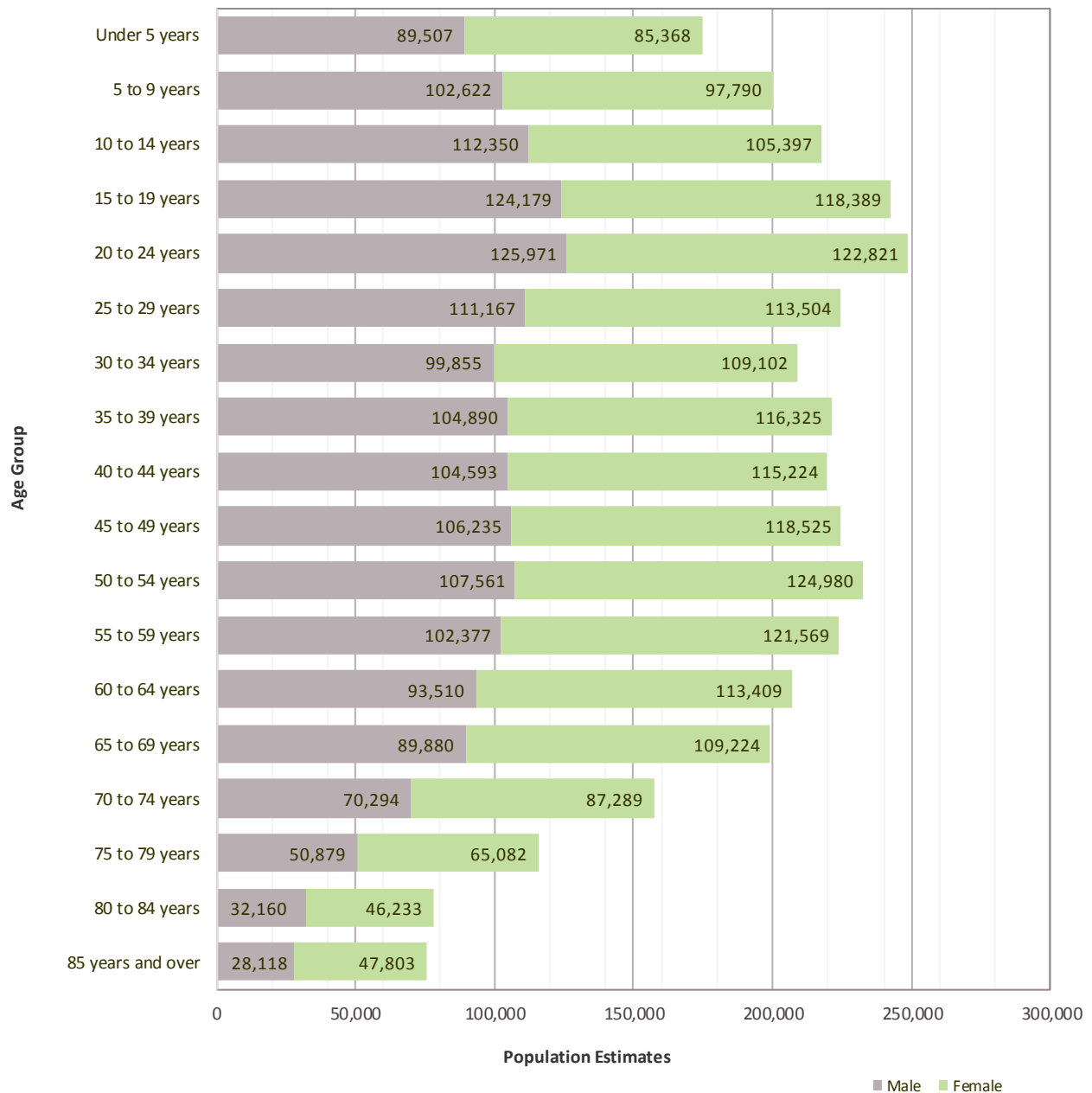
When compared the total population by sex, in 2015, there are 161,886 more females than males. The male population decreases by 126,637 when compared the year 2015 (1,656,148) with the year 2010 (1,782,785). The female population also decreases by 120,708 when compared the year 2015 (1,818,034) with the year 2010 (1,938,742).

Figure 1
Total Population and Population by Sex
(Population Estimates Year July 1, 2010 - 2015)



Source: U.S. Census Bureau, Population Division.

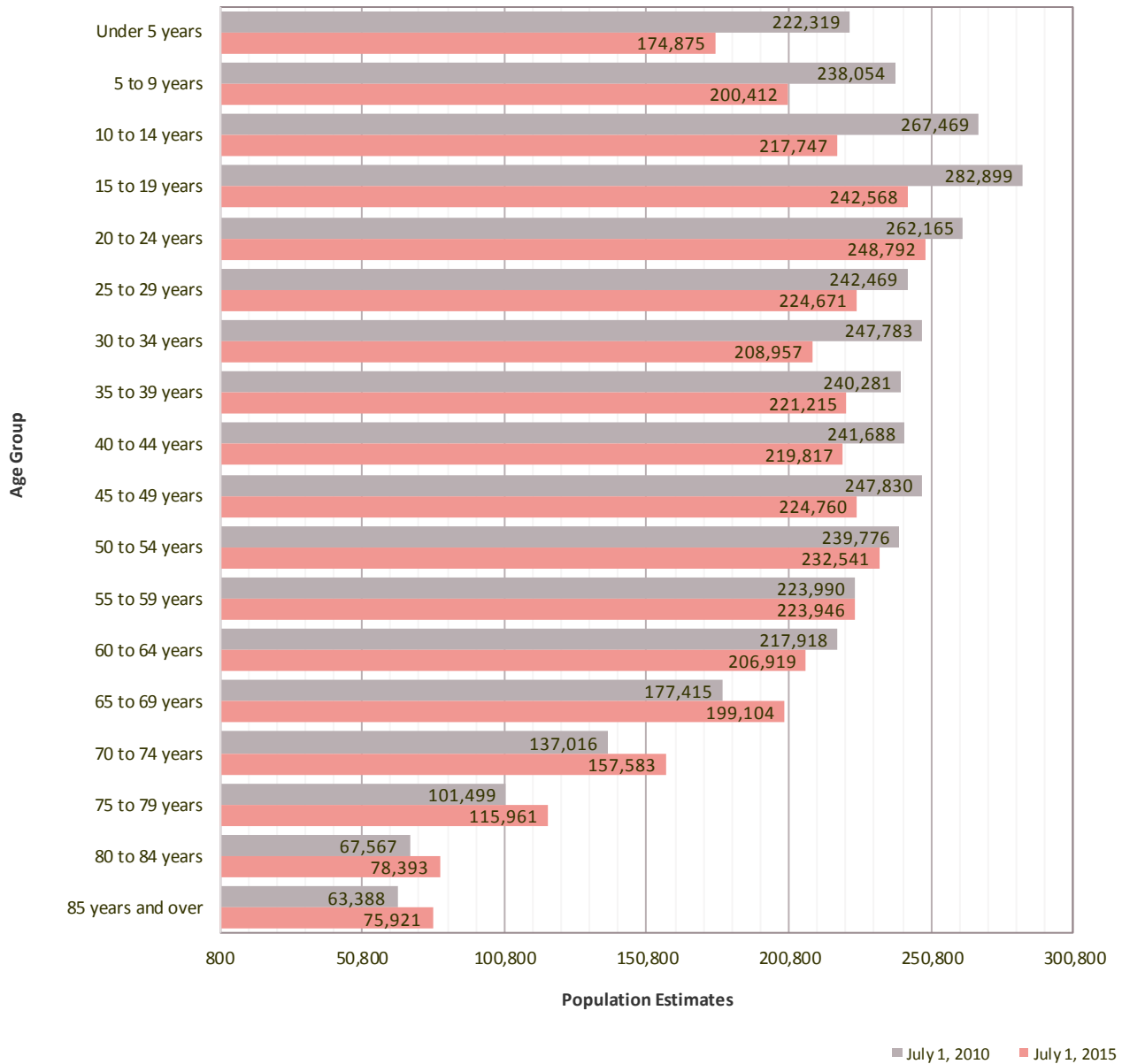
Figure 2
Population Estimates by Age Group and Sex
Year 2015



Source: U.S. Census Bureau, Population Division.

The age group of under 5 years of age until 20 to 24 years old, shows more males than females in 2015. While the age group 25 - 29 to 85 years and over show more females than males. The age group with the highest number of females over males in 2015 was the 60 to 64 years old with a difference of 19,899. They were followed by the age group of 85 years and over (difference of 19,685), 65 to 69 year old shows a difference of 19,344 and 55 to 59 years old, a difference of 19,192 of females over males.

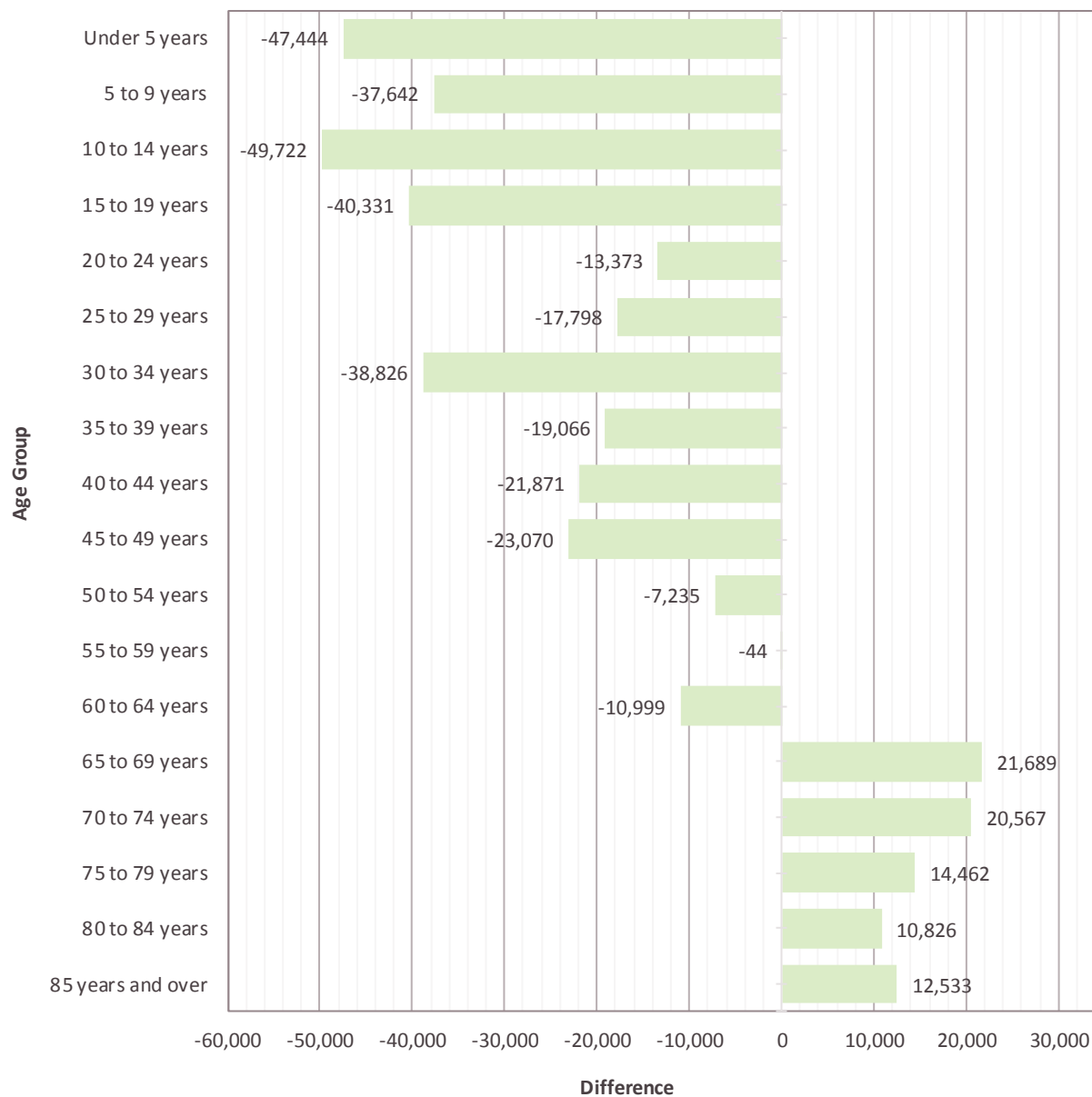
Figure 3
Compared Population by Age Group
Population Estimates July 1, 2010 and 2015



Source: U.S. Census Bureau, Population Division.

The age group with the highest number of persons in 2010 year was the 15 to 19 year old (282,899) and in 2015 was the 20 to 24 year old (248,792). These two age groups shows the highest population in 2015. The age group with the highest population loss was the 10 to 14 year old with 49,722.

Figure 4
Difference in Population by Age Group
Population Estimates July 1, 2010 and 2015



Source: U.S. Census Bureau, Population Division.

The population from 65 year old and over is the age group with the highest increase in 2015 when compared to 2010. The age group 65 to 69 year old show the highest increase, followed by the age group 70 to 74. All groups from 65 to 69 year up to the 85 year old and over, show an increase for 2015. The other age groups reflect decreases in population. The age groups with more losses were the bracket under 5 year up to 15 to 19 years; and the age group 30 to 34 years.

Table 1
Population by Municipalities
Population Estimates July 1, 2010 and 2015

Municipalities	Population Estimates		Change (2010 to 2015)		Municipalities	Population Estimates		Change (2010 to 2015)	
	July 1, 2010	July 1, 2015	Numeric	Percent		July 1, 2010	July 1, 2015	Numeric	Percent
Adjuntas	19,472	18,579	-893	-4.6	Juncos	40,349	39,754	-595	-1.47
Aguada	41,912	39,530	-2382	-5.7	Lajas	25,704	23,935	-1769	-6.88
Aguadilla	60,763	55,804	-4,959	-8.2	Lares	30,631	27,372	-3,259	-10.64
Aguas Buenas	28,653	26,915	-1738	-6.1	Las Marías	9,868	8,881	-987	-10.00
Aibonito	25,874	24,040	-1834	-7.1	Las Piedras	38,714	38,290	-424	-1.10
Añasco	29,265	27,989	-1276	-4.4	Loíza	30,017	27,251	-2,766	-9.21
Arecibo	96,273	89,648	-6,625	-6.9	Luquillo	20,055	19,004	-1051	-5.24
Arroyo	19,572	18,546	-1026	-5.2	Manatí	44,040	40,700	-3,340	-7.58
Barceloneta	24,827	24,650	-177	-0.7	Maricao	6,277	5,903	-374	-5.96
Barranquitas	30,322	29,323	-999	-3.3	Maunabo	12,215	11,315	-900	-7.37
Bayamón	207,917	189,159	-18,758	-9.0	Mayagüez	88,793	79,510	-9,283	-10.45
Cabo Rojo	50,970	49,762	-1208	-2.4	Moca	40,101	37,746	-2355	-5.87
Caguas	142,863	134,481	-8,382	-5.9	Morovis	32,651	31,866	-785	-2.40
Camuy	35,123	32,995	-2128	-6.1	Naguabo	26,773	26,632	-141	-0.53
Canóvanas	47,695	46,972	-723	-1.5	Naranjito	30,387	29,181	-1206	-3.97
Carolina	176,421	161,884	-14,537	-8.2	Orocovis	23,419	21,957	-1462	-6.24
Cataño	28,083	25,641	-2,442	-8.7	Patillas	19,248	17,819	-1429	-7.42
Cayey	48,109	45,490	-2,619	-5.4	Peñuelas	24,215	21,731	-2,484	-10.26
Ceiba	13,612	12,218	-1394	-10.2	Ponce	165,720	149,028	-16,692	-10.07
Ciales	18,752	17,349	-1403	-7.5	Quebradillas	25,895	24,605	-1290	-4.98
Cidra	43,483	41,225	-2258	-5.2	Rincón	15,203	14,551	-652	-4.29
Coamo	40,578	39,862	-716	-1.8	Río Grande	54,292	51,725	-2567	-4.73
Comerío	20,790	19,983	-807	-3.9	Sabana Grande	25,248	23,555	-1693	-6.71
Corozal	37,130	35,037	-2093	-5.6	Salinas	31,043	29,351	-1692	-5.45
Culebra	1,820	1,806	-14	-0.8	San Germán	35,625	32,976	-2,649	-7.44
Dorado	38,238	37,878	-360	-0.9	San Juan	393,971	355,074	-38,897	-9.87
Fajardo	36,876	33,102	-3,774	-10.2	San Lorenzo	41,023	38,721	-2302	-5.61
Florida	12,688	12,188	-500	-3.9	San Sebastián	42,347	39,007	-3,340	-7.89
Guánica	19,377	17,386	-1,991	-10.3	Santa Isabel	23,289	22,517	-772	-3.31
Guayama	45,275	42,721	-2,554	-5.6	Toa Alta	74,280	74,368	88	0.12
Guayanilla	21,523	19,604	-1919	-8.9	Toa Baja	89,465	82,065	-7,400	-8.27
Guaynabo	97,798	90,879	-6,919	-7.1	Trujillo Alto	74,759	69,615	-5,144	-6.88
Gurabo	45,563	47,265	1,702	3.7	Utua	33,053	30,288	-2,765	-8.37
Hatillo	41,978	41,047	-931	-2.2	Vega Alta	39,945	38,640	-1305	-3.27
Hormigueros	17,250	16,478	-772	-4.5	Vega Baja	59,546	54,792	-4,754	-7.98
Humacao	58,375	54,827	-3,548	-6.1	Vieques	9,305	8,950	-355	-3.82
Isabela	45,653	43,398	-2255	-4.9	Villalba	26,003	23,697	-2,306	-8.87
Jayuya	16,639	15,328	-1311	-7.9	Yabucoa	37,880	35,082	-2,798	-7.39
Juana Díaz	50,733	48,060	-2,673	-5.3	Yauco	41,932	37,679	-4,253	-10.14

Source: U.S. Census Bureau, Population Division.

C. Population by Municipalities

When comparing 2010 to 2014 the only two municipalities showing increase in population are: Gurabo (1,702) and Toa Alta (88).

The ten municipalities with highest decrease in population, when compared 2010 and 2015 were: San Juan (38,897), Bayamón (18,758), Ponce (16,692), Carolina (14,537), Mayagüez (9,283), Caguas (8,382), Toa Baja (7,400), Guaynabo (6,919), Arecibo (6,625), and Trujillo Alto (5,144).

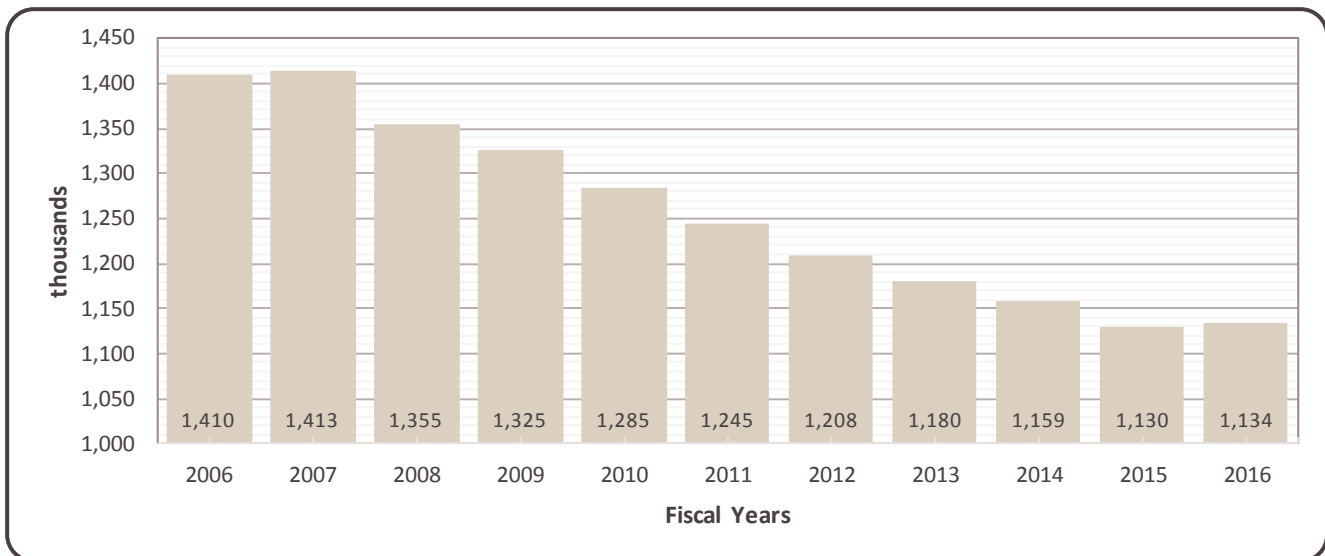
II. Labor Force, Employment and Unemployment

A. Labor Force

The labor force is the sum of employed and unemployed persons. Employed persons consist of: persons who did any work for pay or profit during the survey reference week; persons who did at least 15 hours of unpaid work in a family-operated enterprise; and persons who were temporarily absent from their regular jobs because of illness, vacation, bad weather, industrial dispute, or various personal reasons. Unemployed persons are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. Persons who were not working and were waiting to be recalled to a job from which they had been temporarily laid off are also included as unemployed. Receiving benefits from the Unemployment Insurance (UI) program has no bearing on whether a person is classified as unemployed.

In FY 2016, the labor force was estimated in 1,134,000 persons, representing a increase of 4,000 persons or 0.4% when compared to FY 2015 (1,130,000).

Figure 5
Labor Force (thousands of persons 16 years of age and over) Not Seasonally Adjusted
Fiscal Years 2006 - 2016

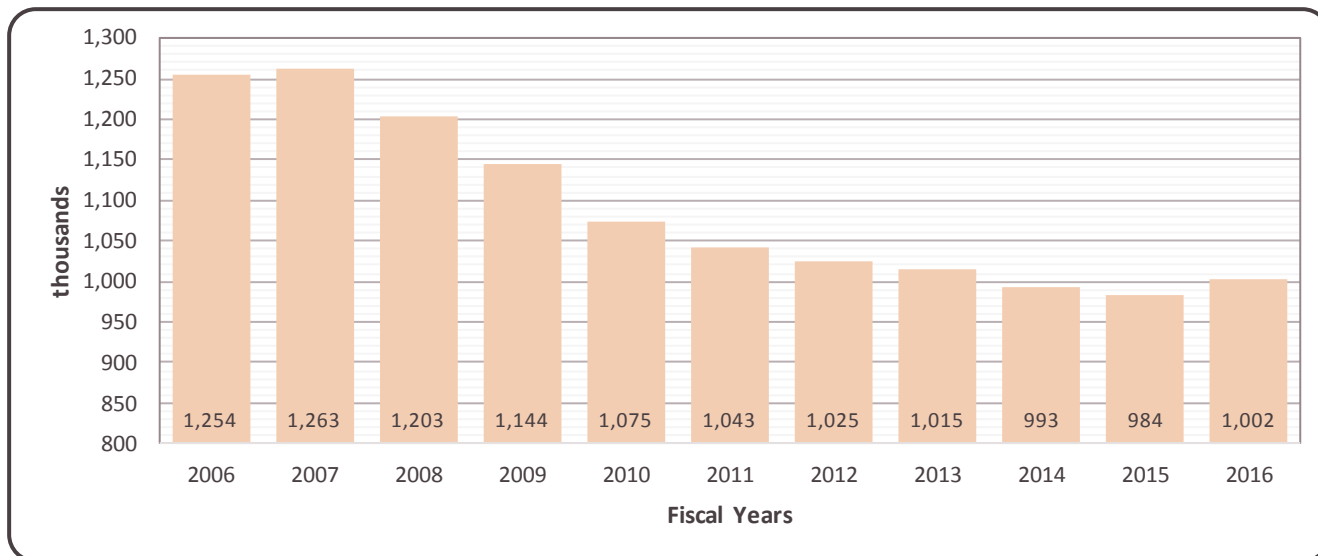


Source: PR Department of Labor and Human Resources - Labor Force Survey.

B. Employment

In FY 2016, (not seasonally adjusted) the number of employed persons (which includes self-employed individuals and agricultural employment) reached a total of 1,002,000. This represents a increase of 18,000 employees in the local economy, when compared to FY 2015 (984,000). The self-employment in FY 2016 was 164,000 or 16.4% of the total of employed persons. In this sector was reflected a increase of 2,000 persons when compared with FY 2015 (162,000).

Figure 6
Total Employment (thousands of persons 16 years of age and over) Not Seasonally Adjusted
Fiscal Years 2006 - 2016

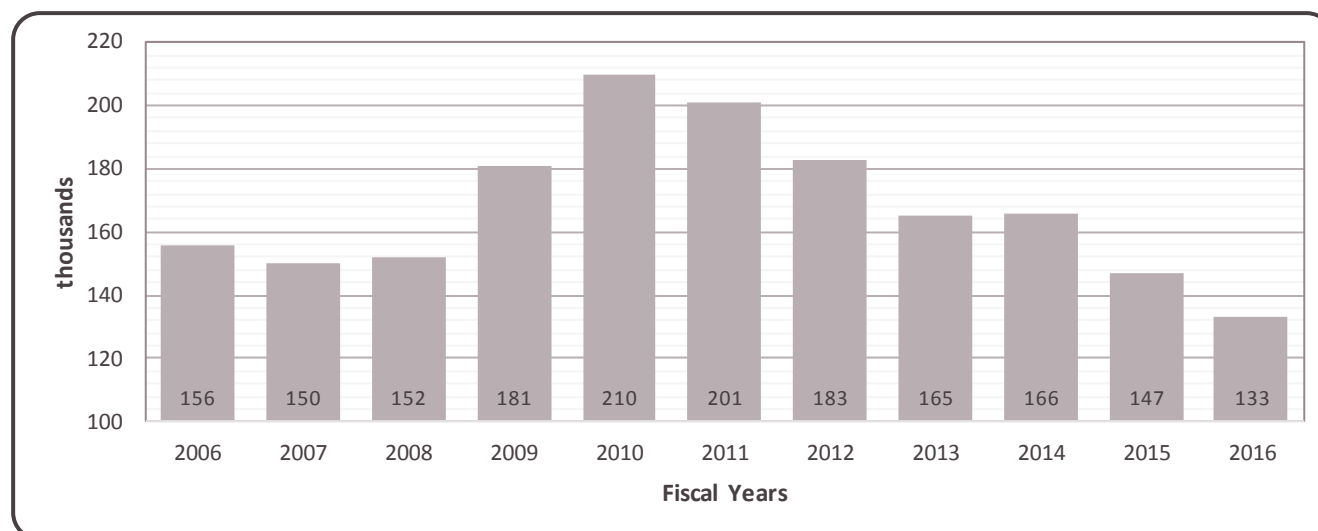


Source: PR Department of Labor and Human Resources - Labor Force Survey.

C. Unemployment

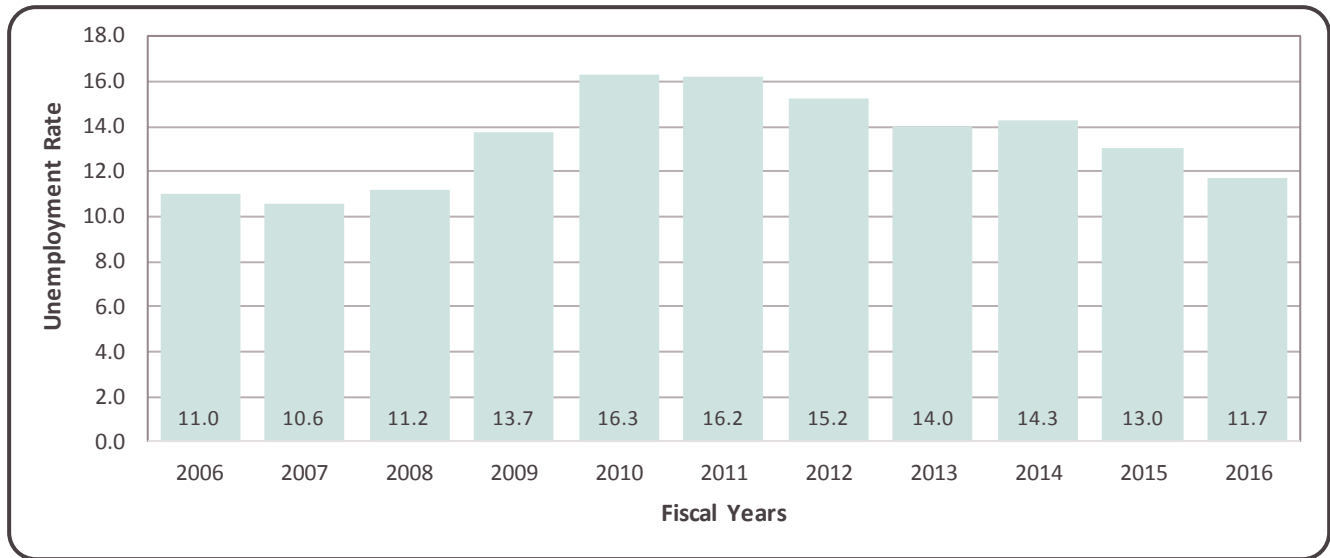
In FY 2016, unemployment (not seasonally adjusted) registered 133,000 or 14,000 unemployed persons less than in FY 2015 (147,000). The unemployment rate (not seasonally adjusted) for FY 2016 was 11.7%, 1.3 percentage points fewer than in FY 2015 with 13.0%. In FY 2016 the unemployment rate (not seasonally adjusted) for male was 13.4% and 9.4% for female. This represents decreases of 1.2% and 1.3% respectively, when compared to FY 2015.

Figure 7
Unemployment (thousands of persons 16 years of age and over) Not Seasonally Adjusted
Fiscal Years 2006 - 2016



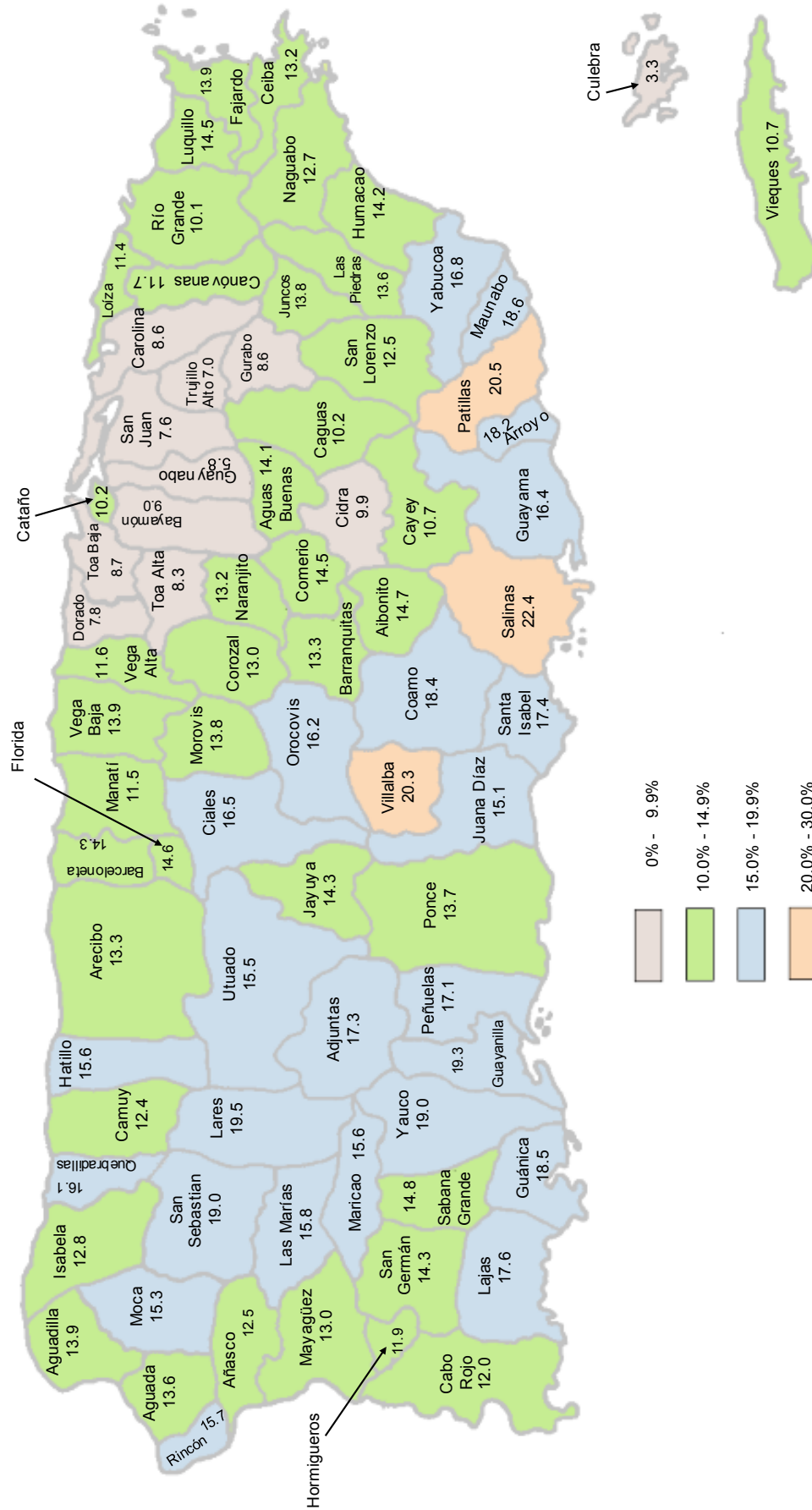
Source: PR Department of Labor and Human Resources - Labor Force Survey.

Figure 8
Unemployment Rate (thousands of persons 16 years of age and over) Not Seasonally Adjusted
Fiscal Years 2006 - 2016



Source: PR Department of Labor and Human Resources - Labor Force Survey.

Figure 9
Unemployment Rate By Municipalities (Not Seasonally Adjusted)
Fiscal Year 2016



Source: Department of Labor and Human Resources - Local Area Unemployment Statistics (LAUS).

D. Labor Force by Local Areas of Labor Development Program (PDL)

In this section we present a profile of each one of the designated Labor Development Program (PDL) under the WIOA program. The program divides the Island into 15 local areas, with a total of 78 municipalities of Puerto Rico.

In this document we will discuss the labor force profile of each area comparing its changes between FY 2015 and FY 2016. The 15 local areas are:

1. Bayamón-Comerio

This area comprises only these two municipalities. The labor force in the subject area presents a raise of 369 persons between FY 2014 and FY 2015. The Bayamón municipality presents the increase with (454) and Comerio a decrease of (-85). In terms of the area's employment it shows increase of 1,127 employees between the two fiscal years, from those 1,061 are from Bayamón and 65 from Comerio. The unemployment in the area also shows a reduction of (-758) persons of which (-607) are from Bayamón and (-150) from Comerio. The unemployment rate between the two fiscal years shows a reduction of (-1.1%) from FY 2014 to FY 2015.

2. Caguas-Guayama

This area comprises eight municipalities of the Island which are Aguas Buenas, Aibonito, Arroyo, Caguas, Cayey, Guayama, Gurabo and Trujillo Alto. For FY 2016 the Labor Force was estimated in 141,250 and for FY 2015 in 140,582, a increase of 668 persons from 2014 to 2015. So is the case for the employment for the area showing a rise of 2,307 person form FY 2015 to FY 2016. The unemployment for the area totaled 16,722 in 2015, a decrease of (-1,639) in FY 2016. This represents a (-1.2%) change in the unemployment rate from FY 2015 to FY 2016.

3. Carolina

Carolina is one of the few municipalities operating by itself as a PDL under the WIOA program. The labor force increased from 63,287 to 63,711 or a rise of 424 persons between the two fiscal years. So is the case with employment raise from 57,324 to 58,207 or 882 more people employed from 2015 to 2016. The unemployed for the area from 5,962 in 2015 to 5,504 in FY 2016 a reduction of (-458) unemployed persons. This represents a (-0.8%) change in the unemployment rate from FY 2015 to FY 2016.

4. Guaynabo Toa - Baja

The area is composed by four municipalities: Cataño, Guaynabo, Toa Alta and Toa Baja. The labor force reflects a raise from FY 2015 to FY 2016, from 101,704 to 102,754 a increase of 1,050. The employment segment also shows a raise for the same period, from 93,261 to 94,886 with a gain of 1,625 more employees. The number of unemployed persons for the discussed period was (-575) less from 2015 to 2016. The unemployment rate changed from 8.3% to 7.7% or (-0.6%) for the studied period.

5. La Montaña

This area composed of the municipalities of Barranquitas, Cidra, Corozal, Orocovis and Naranjito. It is characterized mainly for its diminishing agricultural activity and is located in the central mountainous sector of the Island. Its labor force for FY 2015 was 45,472 and 45,394 for 2016 a

difference of 78 less persons in the labor force. Employment for FY 2015 was 39,215 and 39,773 for FY 2016, a increase of 557 persons. The number of unemployed persons also was reduced from 6,257 to 5,622, a reduction of (-635) unemployed persons. The unemployment rate shows a contraction of (-1.4%) from 13.8% in 2015 to 12.4% in 2016.

6. Mayaguez-Las Marías

This area is composed by only these two municipalities. Its labor force for FY 2015 was 26,929 and 26,829 for FY 2016 reflected a reduction of (-101) persons. The employment sector however, shows an increase of 531 persons from FY 2015 to FY 2016, from 22,716 to 23,248 respectively. The unemployed persons decreased from 4,213 to 3,581, a reduction of (-632) from FY 2015 to 2016, a reduction of (-2.3%) in the unemployment rate for the period.

7. Noreste

This area is composed by nine municipalities: Canóvanas, Ceiba, Culebra, Fajardo, Loiza, Luquillo, Naguabo, Rio Grande, and Vieques. It reduced in its labor force from 73,638 in 2015 to 73,467 in 2016 which means 171 less persons in the labor force. Also, a increase of 1,019 persons is found in its employment component from 63,667 in 2015 and 64,686 in FY 2016. The unemployed persons also diminished for the period when in FY 2015 there were 9,972 unemployed and 8,782 for 2016, a reduction of (-1.6%) in the unemployment rate for the period.

8. Noroeste

This area is composed by seven municipalities: Aguada, Aguadilla, Añasco, Isabela, Moca, Rincón and San Sebastian. The labor force population for the area was estimated in 74,661 for FY 2015 while for FY 2016 was 75,141, which represents a increase of 480 persons more in the labor force from the previous year. The employment of the area for 2015 was 62,498 in FY 2015 and 64,213 for FY 2016; this represents an rise of 1,714 employees. The unemployment shows a reduction from 12,163 in 2015 to 10,929 in 2016 a total of (-1,234) less unemployed in the area. The numbers presented before shows a decrease in the unemployment rate of the area from 16.3% in 2015 to 14.5% in 2016, a difference of (-1.7%).

9. Norte Central - Arecibo

Eight municipalities compose this area, these are: Adjuntas, Arecibo, Camuy, Hatillo, Jayuya, Lares, Quebradillas and Utuado. Its labor force shows a increase of 240 persons from FY 2015 (76,007) to FY 2016 (76,247). The number of employed persons also shows a raise from 63,389 in 2015 to 64,877 in 2016, a gain of 1,489 persons. The number of unemployed persons also decreased for the FY 2015-2016 period, from 12,619 to 11,370 respectively for a total reduction of (-1,249) persons. The unemployment rate for the area decreased from 16.6% to 14.9% or (-1.7)% for the years in discussion.

10. Norte Central – Manatí

This area is composed by eight municipalities: Barceloneta, Ciales, Dorado, Florida, Manatí, Morovis, Vega Alta and Vega Baja. The area presents a reduction in the labor force from 2015 to 2016. For 2015 it was estimated in 70,143 and in 2016; 70,050, a decrease of (-93) persons in the labor force. The employment of this labor force shows figures of 60,523 for PY 2015 and 61,468 for 2016 a increase of 945 employees. Unemployment for the area reflects 9,619 for 2015 and

8,581 for 2016 a decrease of (-1,038). In terms of the unemployment rate, these figures translate to 13.7% in FY 2015 and 12.3% in 2016, a reduction of (-1.5%) in the unemployment rate.

11. Ponce

Ponce is another standalone PDL with a labor force of 48,956 in FY 2015 and 49,021 in FY 2016, increasing in 64 persons from one year to the next. Employment for the municipality was 41,834 for 2015 and 42,308 for 2016, a rise of 474 employed persons. Unemployment for Ponce was register in 7,122 persons in 2015 and 6,712 in 2016 representing 410 less persons unemployed for the last year.

12. San Juan

Like Carolina and Ponce, San Juan is the other standalone PDL of the 15 areas in Puerto Rico. In FY 2015 its labor force was estimated in 136,842 while in FY 2016 this number was 139,124 representing a rise of 2,282 from one year to the other. The employment was 126,035 in 2015 and 128,571 in 2016, a rise of 2,535 employees. Total unemployment in the capital city in 2015 was 10,807 and had a reduction of (-254) persons for a total of 10,553 in 2016. Unemployment rate also shows a reduction from 2015 to 2016 of 0.3%, from 7.9 in 2015 to 7.6 for 2016.

13. Sur Central-Salinas

This area is composed by five municipalities: Coamo, Juana Diaz, Salinas, Santa Isabel and Villalba. The labor force population for the area was estimated in 52,685 for FY 2015 while for FY 2016 was 52,338, which represents a reduction of (-347) persons less in the labor force than the previous year. The employment of the area for 2015 was 42,277 in FY 2015 and 42,870 for FY 2016; this represents a increase of 593 employees. The unemployment shows a reduction from 10,408 in 2015 to 9,468 in 2016 a total of (-940) less unemployed persons in the area. The numbers presented before shows a reduction in the unemployment rate of the area from 19.8% in 2015 to 18.1% in 2016, a difference of (-1.7%).

14. Sureste

Seven municipalities compose this area, these are: Humacao, Juncos, Las Piedras, Maunabo, Patillas, San Lorenzo and Yabucoa. Its labor force shows a reduction of (-299) persons from FY 2015 (71,238) to FY 2016 (70,939). The number of employed persons also shows a increase from 59,503 in 2015 to 60,505 in 2016, a gain of 1,002 persons. The number of unemployed persons also decreased for the FY 2015-2016 period, from 11,735 to 10,434 respectively for a total reduction of (-1,302) persons. The unemployment rate for the area decreased from 16.5% to 14.7% or (-1.8%) for the years in discussion.

15. Suroeste

This is the PDL encompassing the largest number of municipalities with 10. These are: Cabo Rojo, Guánica, Guayanilla, Hormigueros, Lajas, Maricao, Peñuelas, Sabana Grande, San Germán and Yauco. The labor force for FY 2015 was estimated in 71,565 and 71,119 in FY 2016 for a reduction of (-446) persons in the latest year. Employment for the area is distributed in 59,107 for FY 2015 and 60,040 for FY 2016. This presents an increase of 933 persons from one year to the next. The figures for unemployment show 12,458 persons unemployed in 2015 and 11,079 for FY 2016 or

(-1,379) less persons for FY 2015. The unemployment rate for the area was 17.4% percent in 2015 and 15.6% for 2016, a reduction of (-1.8%) in the unemployment rate.

Table 2
Labor Force, Employment, Unemployment and Unemployment Rate by Labor Development Program (PDL)
Fiscal Years 2015 and 2016

Local Area Name	Labor Force			Employment			Unemployment			Unemployment Rate		
	FY 2015	FY 2016	Difference	FY 2015	FY 2016	Difference	FY 2015	FY 2016	Difference	FY 2015	FY 2016	Difference
Bayamón - Comerío	73,233	73,602	369	65,601	66,728	1,127	7,632	6,874	-758	10.4	9.3	-1.1
Bayamón	67,993	68,447	454	61,260	62,321	1,061	6,733	6,126	-607	9.9	9.0	-1.0
Comerío	5,240	5,154	-85	4,341	4,406	65	898	748	-150	17.1	14.5	-2.6
Caguas - Guayama	140,582	141,250	668	123,860	126,167	2,307	16,722	15,083	-1,639	11.9	10.7	-1.2
Aguas Buenas	6,912	6,883	-29	5,819	5,909	90	1,093	974	-120	15.8	14.1	-1.7
Aibonito	6,777	6,762	-15	5,682	5,767	86	1,095	995	-101	16.1	14.7	-1.4
Arroyo	5,253	5,239	-14	4,145	4,285	141	1,108	953	-154	21.1	18.2	-2.9
Caguas	48,669	48,961	292	43,229	43,949	719	5,439	5,012	-427	11.2	10.2	-1.0
Cayey	16,329	16,406	76	14,411	14,657	246	1,918	1,748	-170	11.8	10.7	-1.1
Guayama	12,334	12,325	-9	9,966	10,309	342	2,368	2,016	-352	19.2	16.4	-2.8
Gurabo	17,066	17,101	36	15,389	15,638	248	1,676	1,464	-213	9.8	8.6	-1.3
Trujillo Alto	27,243	27,574	332	25,219	25,653	435	2,024	1,921	-103	7.4	7.0	-0.5
Carolina	63,287	63,711	424	57,324	58,207	882	5,962	5,504	-458	9.4	8.6	-0.8
Guaynabo - Toa Baja	101,704	102,754	1,050	93,261	94,886	1,625	8,443	7,868	-575	8.3	7.7	-0.6
Cataño	8,136	8,174	38	7,212	7,342	130	924	832	-93	11.3	10.2	-1.2
Guaynabo	37,242	37,811	569	34,943	35,612	670	2,299	2,199	-101	6.2	5.8	-0.4
Toa Alta	26,031	26,304	273	23,737	24,117	380	2,293	2,187	-107	8.8	8.3	-0.5
Toa Baja	30,296	30,466	170	27,369	27,815	445	2,926	2,651	-275	9.7	8.7	-1.0
La Montaña	45,472	45,394	-78	39,215	39,773	557	6,257	5,622	-635	13.8	12.4	-1.4
Barranquitas	7,453	7,502	49	6,387	6,504	118	1,067	998	-69	14.3	13.3	-1.0
Cidra	15,708	15,769	61	13,979	14,206	228	1,729	1,563	-167	11.0	9.9	-1.1
Corozal	9,576	9,481	-95	8,189	8,248	59	1,387	1,233	-154	14.5	13.0	-1.5
Orocovis	5,332	5,328	-4	4,393	4,466	73	939	862	-77	17.6	16.2	-1.4
Naranjito	7,403	7,315	-88	6,268	6,348	81	1,136	967	-169	15.3	13.2	-2.1
Mayagüez - Las Marías	26,929	26,829	-101	22,716	23,248	531	4,213	3,581	-632	15.6	13.3	-2.3
Las Marías	2,910	2,960	50	2,318	2,494	176	592	467	-126	20.4	15.8	-4.6
Mayagüez	24,019	23,868	-151	20,399	20,754	355	3,620	3,114	-506	15.1	13.0	-2.0
Noreste	73,638	73,467	-171	63,667	64,686	1,019	9,972	8,782	-1,190	13.5	12.0	-1.6
Canóvanas	16,183	16,305	122	14,172	14,404	231	2,011	1,901	-110	12.4	11.7	-0.8
Ceiba	3,965	3,937	-29	3,355	3,419	64	610	518	-92	15.4	13.2	-2.2
Culebra	805	861	56	769	832	64	37	29	-8	4.6	3.4	-1.2
Fajardo	11,811	11,699	-112	9,892	10,070	178	1,919	1,630	-290	16.3	13.9	-2.3
Loíza	8,945	8,948	3	7,810	7,931	122	1,135	1,016	-119	12.7	11.4	-1.3
Luquillo	6,563	6,455	-109	5,416	5,517	101	1,147	938	-209	17.5	14.5	-3.0
Naguabo	8,201	8,077	-124	7,030	7,054	24	1,171	1,023	-148	14.3	12.7	-1.6
Rio Grande	17,165	17,187	21	15,223	15,459	236	1,942	1,728	-214	11.3	10.1	-1.3
Vieques	3,183	3,336	153	2,781	2,978	197	402	358	-45	12.7	10.7	-1.9
Noroeste	74,661	75,141	480	62,498	64,213	1,714	12,163	10,929	-1,234	16.3	14.5	-1.7
Aguada	11,973	12,044	71	10,102	10,403	300	1,871	1,641	-229	15.6	13.6	-2.0
Aguadilla	14,944	15,165	221	12,688	13,057	368	2,256	2,109	-147	15.1	13.9	-1.2
Añasco	8,924	8,952	28	7,619	7,835	216	1,305	1,117	-188	14.6	12.5	-2.1
Isabela	12,465	12,556	91	10,748	10,954	206	1,717	1,602	-115	13.8	12.8	-1.0
Moca	10,721	10,850	129	8,921	9,190	269	1,799	1,660	-140	16.8	15.3	-1.5
Rincón	4,686	4,675	-11	3,833	3,942	109	854	733	-121	18.2	15.6	-2.6
San Sebastián	10,949	10,901	-49	8,587	8,833	246	2,362	2,067	-295	21.6	19.0	-2.6

Source: Department of Labor and Human Resources, Local Area Unemployment Statistics (LAUS).

Table 2 (Cont.)
Labor Force, Employment, Unemployment and Unemployment Rate by Labor Development Program (PDL)
Fiscal Years 2015 and 2016

Local Area Name	Labor Force			Employment			Unemployment			Unemployment Rate		
	FY 2015	FY 2016	Difference	FY 2015	FY 2016	Difference	FY 2015	FY 2016	Difference	FY 2015	FY 2016	Difference
Norte Central - Arecibo	76,007	76,247	240	63,389	64,877	1,489	12,619	11,370	-1,249	16.6	14.9	-1.7
Adjuntas	4,467	4,432	-35	3,585	3,665	81	882	766	-116	19.7	17.3	-2.5
Arecibo	24,113	24,178	65	20,481	20,960	479	3,632	3,218	-413	15.1	13.3	-1.7
Camuy	9,522	9,539	18	8,170	8,358	188	1,352	1,182	-170	14.2	12.4	-1.8
Hatillo	13,031	13,211	180	10,917	11,146	229	2,113	2,064	-49	16.2	15.6	-0.6
Jayuya	4,177	4,171	-6	3,501	3,576	75	676	595	-82	16.2	14.3	-1.9
Lares	7,591	7,563	-28	5,929	6,092	163	1,662	1,471	-191	21.9	19.5	-2.4
Quebradillas	6,088	6,086	-3	4,983	5,108	125	1,106	978	-128	18.2	16.1	-2.1
Utua	7,019	7,068	50	5,823	5,972	150	1,196	1,096	-100	17.0	15.5	-1.5
Norte Central - Manatí	70,143	70,050	-93	60,523	61,468	945	9,619	8,581	-1,038	13.7	12.3	-1.5
Barceloneta	6,012	5,864	-148	4,962	5,025	63	1,051	839	-211	17.5	14.3	-3.2
Ciales	4,030	3,938	-92	3,237	3,287	50	793	651	-142	19.6	16.5	-3.1
Dorado	12,714	12,863	149	11,648	11,856	208	1,066	1,007	-59	8.4	7.8	-0.6
Florida	3,458	3,419	-40	2,878	2,920	41	580	499	-81	16.8	14.6	-2.2
Manatí	11,799	11,853	54	10,285	10,486	201	1,514	1,367	-147	12.8	11.5	-1.3
Morovis	8,226	8,127	-99	6,910	7,009	99	1,316	1,118	-198	16.0	13.8	-2.2
Vega Alta	9,895	9,933	38	8,651	8,782	131	1,244	1,152	-93	12.6	11.6	-1.0
Vega Baja	14,008	14,052	44	11,952	12,104	152	2,056	1,948	-108	14.7	13.9	-0.8
Ponce	48,956	49,021	64	41,834	42,308	474	7,122	6,712	-410	14.6	13.7	-0.9
San Juan	136,842	139,124	2,282	126,035	128,571	2,535	10,807	10,553	-254	7.9	7.6	-0.3
Sur Central - Salinas	52,685	52,338	-347	42,277	42,870	593	10,408	9,468	-940	19.8	18.1	-1.7
Coamo	11,128	11,101	-26	8,899	9,061	161	2,228	2,041	-187	20.0	18.4	-1.7
Juana Díaz	15,763	15,729	-34	13,272	13,355	83	2,492	2,374	-117	15.8	15.1	-0.7
Salinas	8,243	7,763	-479	6,095	6,027	-68	2,148	1,737	-411	26.0	22.3	-3.7
Santa Isabel	9,649	9,767	118	7,742	8,067	325	1,907	1,700	-207	20.0	17.6	-2.4
Villalba	7,902	7,977	75	6,269	6,362	92	1,633	1,615	-18	20.7	20.2	-0.5
Sureste	71,238	70,939	-299	59,503	60,505	1,002	11,735	10,434	-1,302	16.5	14.7	-1.8
Humacao	17,856	17,765	-91	14,982	15,243	261	2,874	2,522	-352	16.1	14.2	-1.9
Juncos	12,439	12,465	26	10,606	10,750	145	1,833	1,715	-119	14.7	13.8	-1.0
Las Piedras	11,364	11,327	-37	9,646	9,786	140	1,717	1,541	-177	15.1	13.6	-1.5
Maunabo	3,085	3,094	9	2,472	2,518	46	613	576	-37	19.9	18.6	-1.3
Patillas	4,917	4,957	40	3,810	3,942	133	1,107	1,014	-93	22.5	20.5	-2.1
San Lorenzo	12,144	12,060	-84	10,388	10,553	165	1,756	1,507	-249	14.4	12.5	-1.9
Yabucoa	9,434	9,271	-163	7,600	7,713	113	1,834	1,558	-276	19.4	16.8	-2.6
Suroeste	71,565	71,119	-446	59,107	60,040	933	12,458	11,079	-1,379	17.4	15.6	-1.8
Cabo Rojo	14,236	14,137	-99	12,192	12,438	246	2,044	1,699	-345	14.3	12.0	-2.3
Guánica	4,359	4,205	-154	3,390	3,429	39	969	776	-193	22.2	18.5	-3.7
Guayanilla	5,420	5,386	-34	4,319	4,349	30	1,101	1,037	-64	20.3	19.2	-1.1
Hormigueros	5,626	5,664	38	4,911	4,990	80	715	673	-42	12.7	11.9	-0.8
Lajas	5,744	5,676	-68	4,584	4,675	92	1,160	1,001	-159	20.2	17.6	-2.5
Maricao	1,904	1,869	-36	1,552	1,577	26	353	292	-61	18.5	15.6	-2.9
Penuelas	6,399	6,289	-110	5,174	5,216	42	1,225	1,073	-152	19.1	17.1	-2.1
Sabana Grande	6,474	6,471	-3	5,412	5,514	102	1,062	957	-105	16.4	14.8	-1.6
San German	10,467	10,490	23	8,826	8,994	168	1,641	1,496	-145	15.7	14.2	-1.4
Yauco	10,937	10,934	-4	8,749	8,859	110	2,188	2,075	-113	20.0	19.0	-1.0

Source: Department of Labor and Human Resources, Local Area Unemployment Statistics (LAUS).

III. Employment by Industry

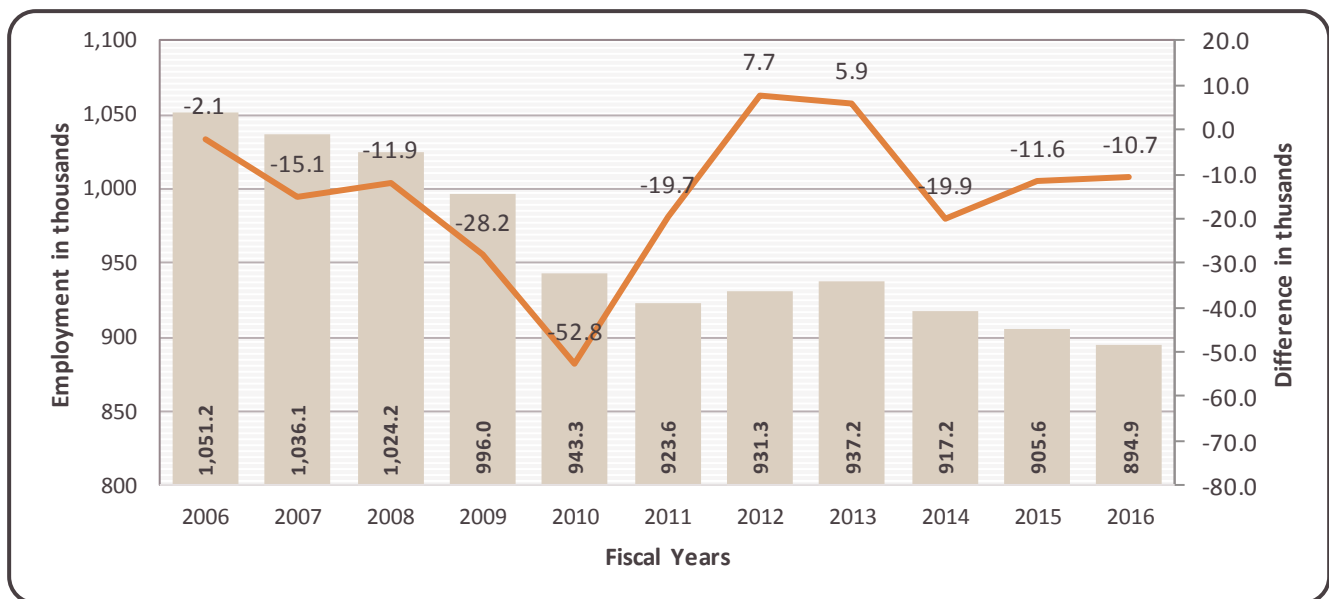
A. Current Employment Statistics Survey

Nonfarm employment declined by 10,700 in fiscal year 2016, mainly due the significant loss in the Government sector. On the other side, the industry sector that added more jobs in fiscal year 2016 when compare to fiscal year 2015, were Leisure & Hospitality (1,500) and Information (400).

In FY 2016 the major industry group that show the highest representation in historical series from FY 2006 to 2016 was Leisure and Hospitality.

The industry sector with major jobs losses in FY 2016 is Mining, Logging & Construction (-3,600); Government (-3,400); Manufacturing (-1,900); Professional and Business Services (-1,400); Educational & Health Service (-1,200); Financial activities (-800); and Other Service (-400) had jobs losses for FY 2015 to 2016 period. The industry sector of Trade, Transportation, and Utilities remained the same as the previous year.

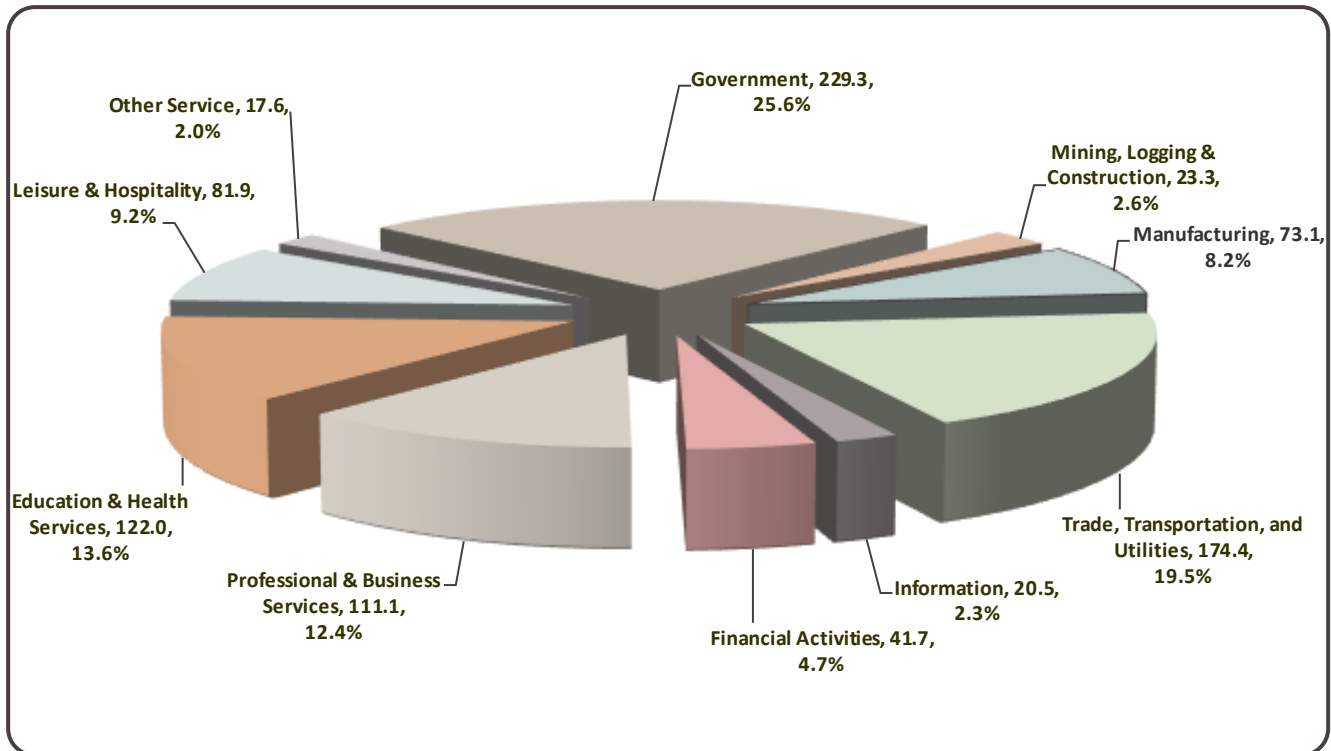
Figure 10
Non Farm Employment (All Industries)
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

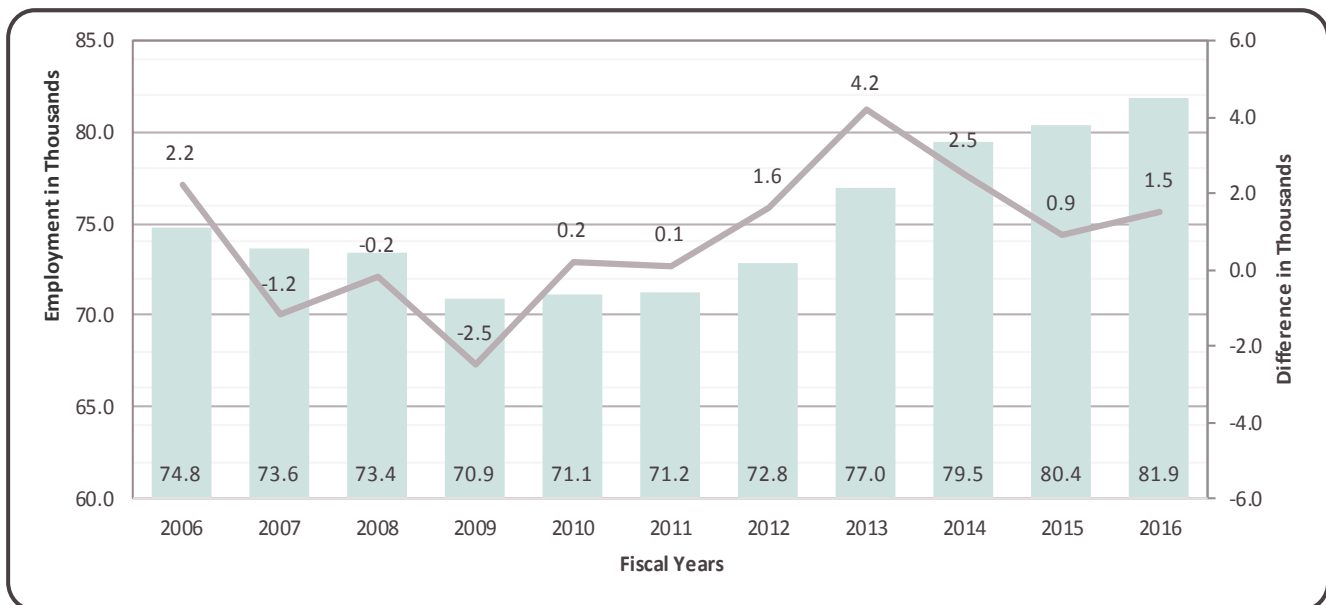
The distribution of employment for fiscal year 2016 by major industry sector is shown in the next chart. The three industries with the higher employment are: Government (229,300), Trade, Transportation, and Utilities (174,400), and Education & Health Services (122,000).

Figure 11
Non Farm Employment (All Industries)
Industry Percent Distribution - Not Seasonally Adjusted - Fiscal Year 2016



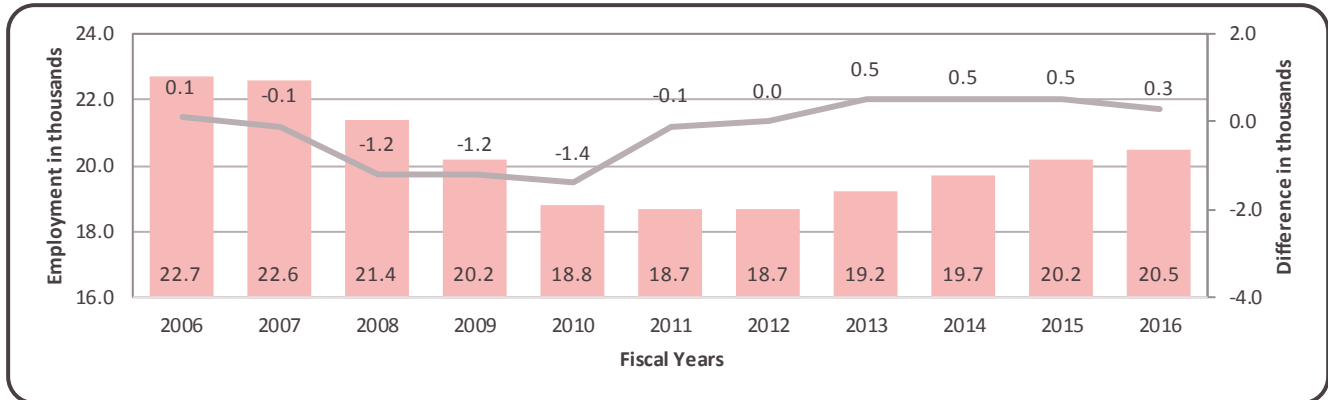
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 12
Non Farm Employment: Leisure & Hospitality
(thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



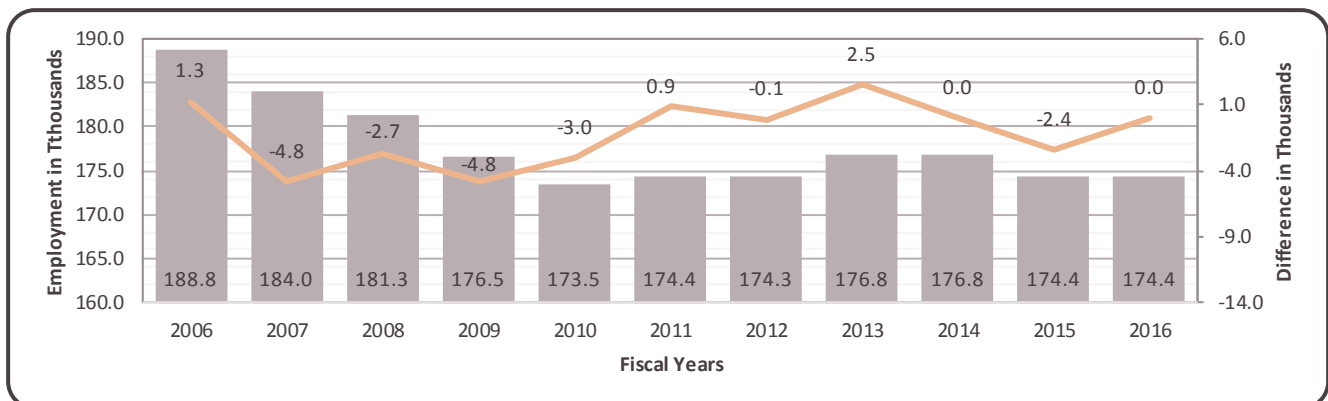
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 13
Non Farm Employment: Information
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



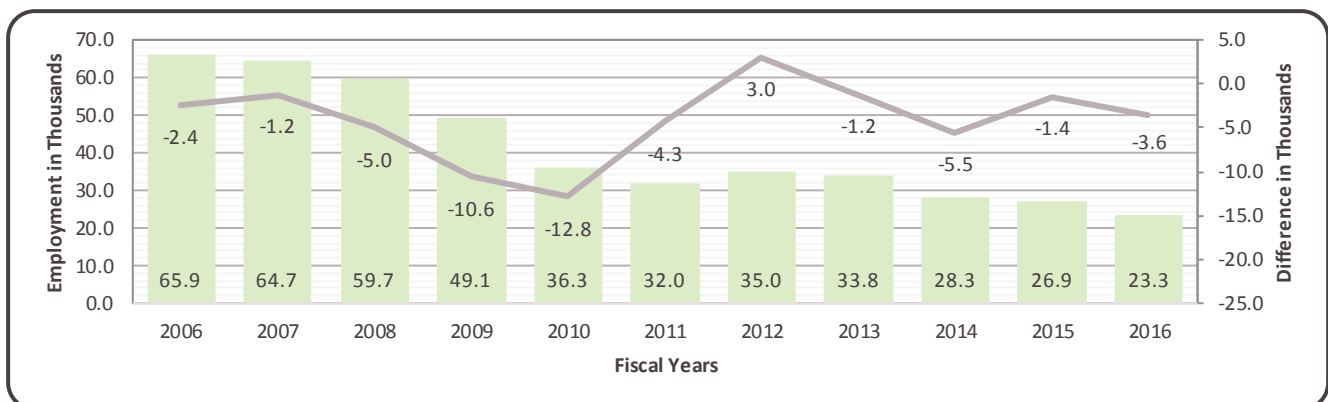
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 14
Non Farm Employment: Trade, Transportation & Utilities
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



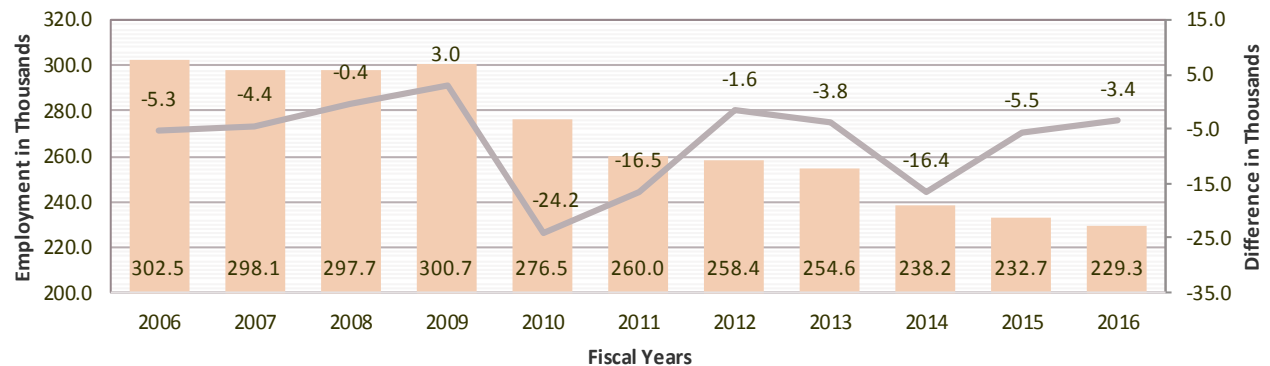
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 15
Non Farm Employment: Mining, Logging & Construction
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



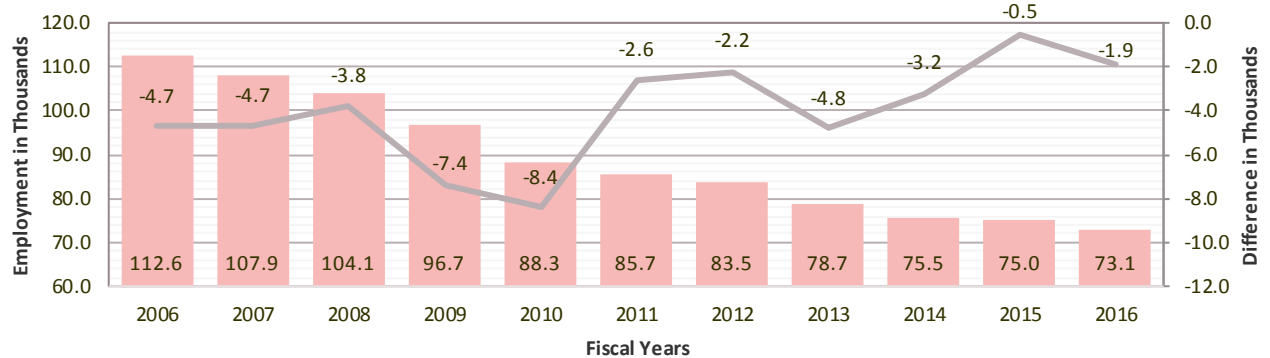
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 16
Non Farm Employment: Government
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



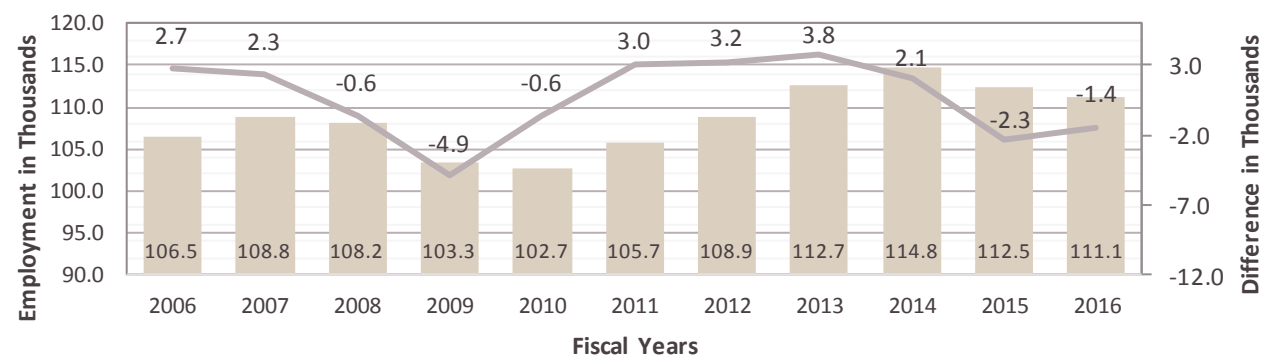
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 17
Non Farm Employment: Manufacturing
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



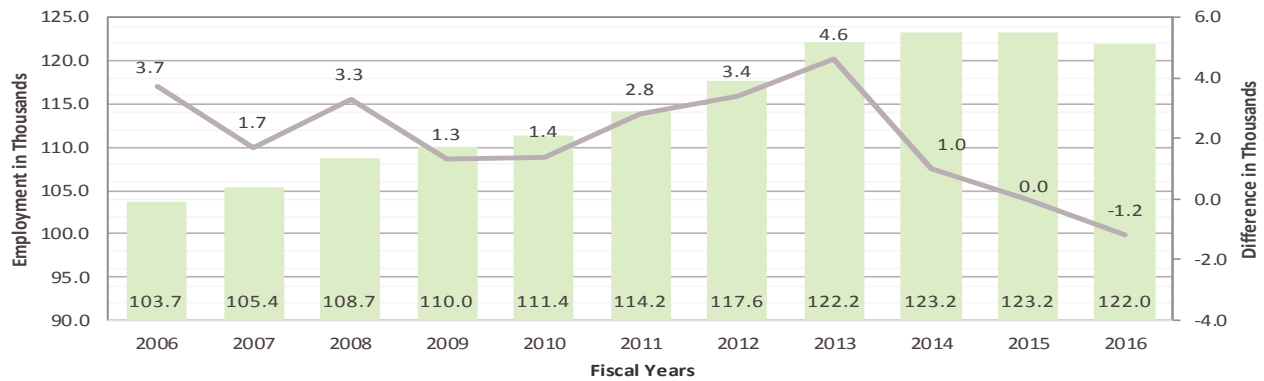
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 18
Non Farm Employment: Professional and Business Services
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 19
Non Farm Employment: Educational and Health Services
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



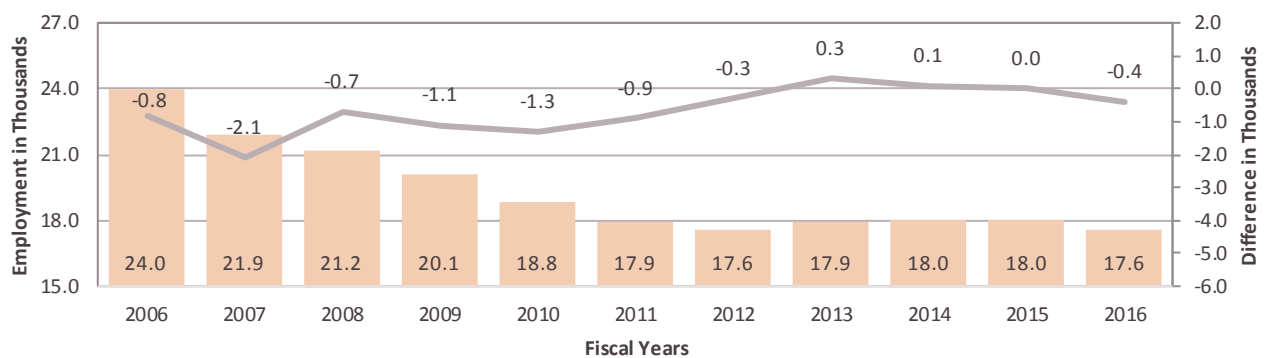
Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 20
Non Farm Employment: Financial Activities
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

Figure 21
Non Farm Employment: Other Services
 (thousands of person) Not Seasonally Adjusted - Fiscal Years 2006-2016



Source: PR Department of Labor and Human Resource - Current Employment Statistic (CES).

IV. Business Employment Dynamics (BED)

A. Trends in Gross Job Gains and Job Losses

Opening and expanding private sector business establishments in Puerto Rico gained 42,210 jobs in the fourth quarter of 2015. This represents an increase of 824 from the previous quarter. Over the quarter, expanding establishments added 34,193 jobs, while opening establishments added 8,017.

Gross job losses totaled 39,180 in the fourth quarter of 2015, a decrease of 3,434 from the third quarter of 2015. This was the second decrease in gross job losses since September of 2015. In the fourth quarter of 2015, contracting establishments lost 32,968 jobs, while closing establishments accounted for a loss of 6,212 jobs.

Table 3
Three-Month Private Sector Gross Job Gains and Losses, seasonally adjusted
Fourth Quarter 2015

Category	(3 months ended)				
	Dec. 2014	March 2015	June 2015	Sept. 2015	Dec. 2015
Gross job gains	43,614	35,793	38,676	41,386	42,210
At expanding establishments	36,925	30,001	32,223	34,894	34,193
At opening establishments	6,689	5,792	6,453	6,492	8,017
Gross job losses	33,418	43,227	46,166	42,614	39,180
At contracting establishments	26,707	36,496	33,639	35,677	32,968
At closing establishments	6,711	6,731	12,527	6,937	6,212
Net employment change^{1/}	10,196	-7,434	-7,490	-1,228	3,030

1/ The net employment change is the difference between total gross job gains and total gross job losses.

Source: PR Department of Labor and Human Resources—Business Employment Dynamics (BED).

From October to December 2015 in Puerto Rico, gross job gains represented 6.3 percent of private sector employment, and gross job losses represented 5.8 percent of the private sector employment, according to preliminary data released by the Bureau of Labor Statistics of the U.S. Department of Labor. This is less than the national rate of gross job gains (6.6 percent) and the same for job losses (5.8 percent). The number of job gains from opening and expanding establishments was 39,180 and the number of job losses from closing and contracting establishments was 42,614. Expanding and contracting establishments accounted for most of the jobs gained and lost.

B. Rates of Gross Job Gains and Gross Job Losses

From October to December 2015, gross job gains represented 6.3 percent of private sector employment. Over the quarter, gross job gains at expanding establishments represented 5.1 percent of private sector employment, and gross job gains at opening establishments represented 1.2 percent. Nationally, these quarter gross job gains at expanding establishments represented 5.4 percent of private sector employment, and at opening establishments represented 1.2 percent.

For the same period, gross job losses represented 5.8 percent of private sector employment. Gross job losses at contracting establishments represented 4.9 percent of private sector employment, the national rate at contracting establishments was 4.7 percent. The rate of gross job losses at closing establishments was 0.9 for Puerto Rico, and 1.1 percent for the United States.

Table 4
Three-Month Private Sector Gross Job Gains and Losses as percent of employment,
seasonally adjusted - Fourth Quarter 2014

Category	(3 months ended)				
	Dec. 2014	March 2014	June 2015	Sept. 2015	Dec. 2015
Total Private for Commonwealth of Puerto Rico					
	Rates (percent)				
Gross job gains	6.4	5.3	5.8	6.2	6.3
At expanding establishments	5.4	4.4	4.8	5.2	5.1
At opening establishments	1.0	0.9	1.0	1.0	1.2
Gross job losses	4.9	6.4	6.8	6.3	5.8
At contracting establishments	3.9	5.4	5.0	5.3	4.9
At closing establishments	1.0	1.0	1.8	1.0	0.9
Net employment change^{1/}	1.5	-1.1	-1.0	-0.1	0.5
Total Private for United States as a whole					
	Rates (percent)				
Gross job gains	6.6	5.9	6.4	6.1	6.6
At expanding establishments	5.4	4.8	5.3	5.0	5.4
At opening establishments	1.2	1.1	1.1	1.1	1.2
Gross job losses	5.7	5.7	5.7	5.8	5.8
At contracting establishments	4.6	4.7	4.7	4.8	4.7
At closing establishments	1.1	1.0	1.0	1.0	1.1
Net employment change^{1/}	0.9	0.2	0.7	0.3	0.8

1/ The net employment change is the difference between total gross job gains and total gross job losses.

Source: PR Department of Labor and Human Resources—Business Employment Dynamics (BED).

C. Number of Establishments Gaining and Losing Employment

Another way to observe the dynamics of employment change is to count the number of establishments that opened, closed, expanded, or contracted during the quarter. Out of 43,785 active private sector establishments, a total of 9,466 gained jobs from October to December 2015. Of these, 7,995 were expanding establishments and 1,471 were opening establishments. During the fourth quarter of 2015, 8,531 establishments showed job losses. Of these, 7,180 were contracting establishments and 1,351 were closing establishments.

D. Establishment Births and Deaths

From October to December 2015, a total of 900 new private sector, non-farm businesses created 4,576 jobs. This represented an increase of 68 establishment births from the prior quarter and a decrease of 239 jobs. The job gains from these new establishments represented 0.7 percent of total births employment. The historical time series of birth data shows that the number of establishment

births has remained around 900 every quarter.

Table 5
Three-Month Private Sector Establishments by Direction of Employment Change
seasonally adjusted - Fourth Quarter 2014

Category	(3 months ended)				
	Dec. 2014	March 2015	June 2015	Sept. 2015	Dec. 2015
Establishments gaining jobs	9,367	8,227	8,561	8,250	9,466
Expanding establishments	8,010	6,988	7,370	7,000	79,995
Opening establishments	1,357	1,239	1,191	1,250	1,471
Establishments losing jobs	8,378	9,906	9,363	9,392	8,531
Contracting establishments	7,044	8,324	7,767	7,964	7,180
Closing establishments	1,334	1,582	1,596	1,428	1,351
Net employment change^{1/}	23	-343	-405	-178	120

1/ The net employment change is the difference between the number of opening establishments and the number of closing establishment.

Source: PR Department of Labor and Human Resources—Business Employment Dynamics (BED).

V. Occupational Employment Survey

A. Occupational Employment and Wage Estimates 2015

According to the 2015 Occupational Employment Survey, estimated employment for the year was 890,760. The hourly mean wage was \$13.56 and the hourly median wage was \$9.61. In terms of employment and wages by major occupational group, the Office and Administrative Support Occupations had the highest employment with 167,480. The hourly mean and median wage for this group was \$11.49 and \$9.44, respectively. Other occupational groups that stand out in terms of employment were, Sales and Related Occupations, 112,040 workers; Food Preparations and Serving Related Occupations, 71,680 workers; Education, Training, and Library Occupations, 65,910; Production Occupations, 61,130 workers; and Protective Service Occupations, 54,470 workers.

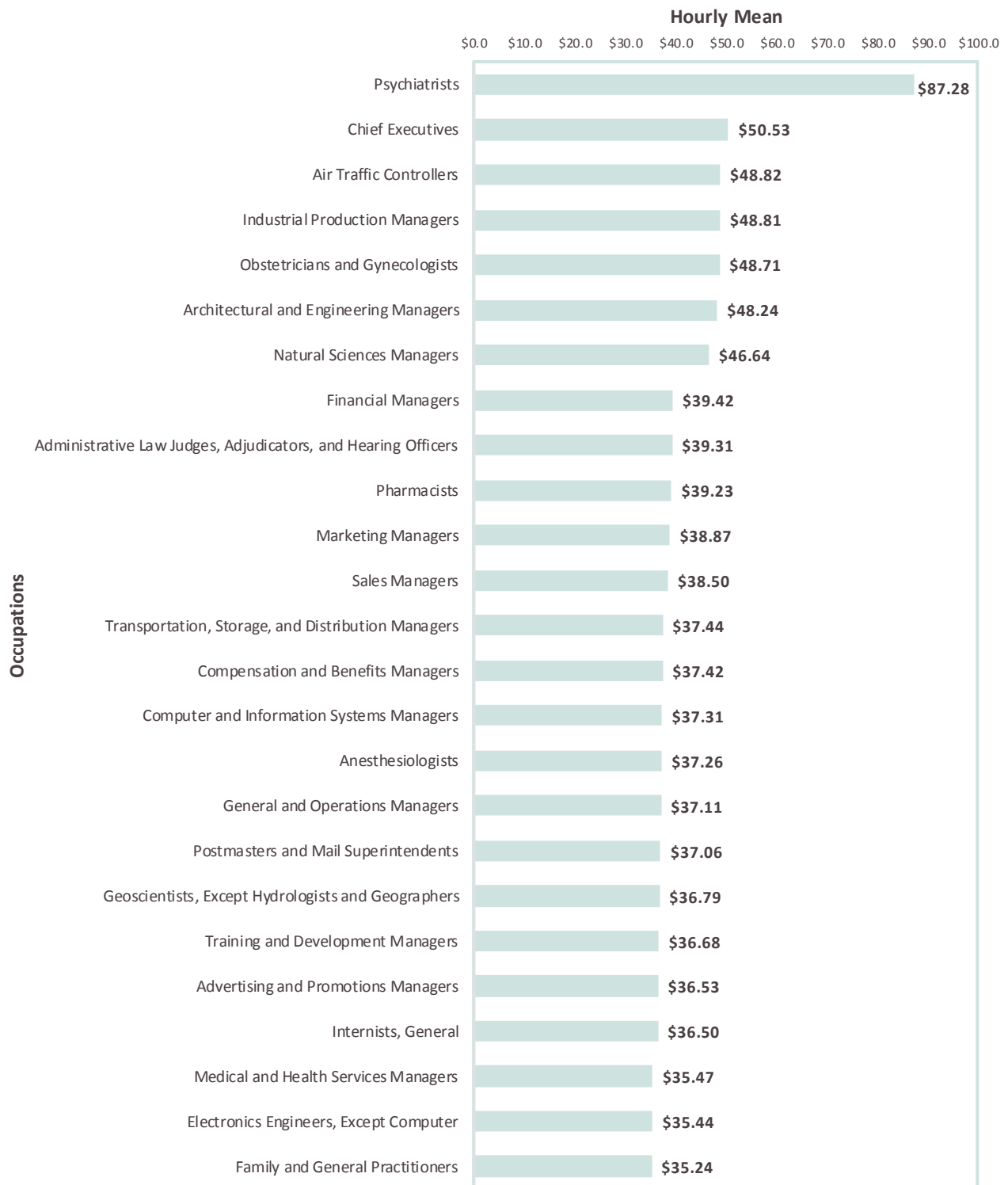
Table 6
Employment and Wages by Major Occupational Group, 2015

SOC Code	Occupational Group (SOC Title)	Employment	Hourly Wage		Annual Wage	
		Total	Mean	Median	Mean	Median
11-0000	Management Occupations	38,140	\$34.63	\$28.38	\$72,020	\$59,030
13-0000	Business and Financial Operations Occupations	39,890	\$18.56	\$15.71	\$38,610	\$32,680
15-0000	Computer and Mathematical Occupations	9,430	\$20.73	\$18.30	\$43,110	\$38,070
17-0000	Architecture and Engineering Occupations	12,700	\$26.07	\$24.13	\$54,220	\$50,180
19-0000	Life, Physical, and Social Science Occupations	6,580	\$21.77	\$18.24	\$45,280	\$37,940
21-0000	Community and Social Service Occupations	15,670	\$13.76	\$12.89	\$28,620	\$26,800
23-0000	Legal Occupations	4,460	\$30.49	\$26.50	\$63,420	\$55,120
25-0000	Education, Training, and Library Occupations	65,910	\$16.84	\$15.57	\$35,020	\$32,390
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	6,910	\$15.70	\$13.01	\$32,660	\$27,050
29-0000	Healthcare Practitioners and Technical Occupations	51,740	\$17.24	\$13.77	\$35,850	\$28,640
31-0000	Healthcare Support Occupations	10,430	\$9.49	\$8.81	\$19,730	\$18,320
33-0000	Protective Service Occupations	54,470	\$12.05	\$10.48	\$25,070	\$21,810
35-0000	Food Preparation and Serving Related Occupations	71,680	\$8.80	\$8.60	\$18,300	\$17,880
37-0000	Building and Grounds Cleaning and Maintenance Occupations	40,240	\$9.29	\$8.71	\$19,310	\$18,120
39-0000	Personal Care and Service Occupations	16,550	\$9.03	\$8.62	\$18,780	\$17,930
41-0000	Sales and Related Occupations	112,040	\$10.57	\$8.87	\$21,980	\$18,450
43-0000	Office and Administrative Support Occupations	167,480	\$11.49	\$9.44	\$23,900	\$19,630
45-0000	Farming, Fishing, and Forestry Occupations	2,080	\$10.35	\$8.92	\$21,530	\$18,550
47-0000	Construction and Extraction Occupations	29,560	\$10.11	\$8.91	\$21,020	\$18,520
49-0000	Installation, Maintenance, and Repair Occupations	30,250	\$13.14	\$11.06	\$27,320	\$23,010
51-0000	Production Occupations	61,130	\$11.27	\$9.31	\$23,430	\$19,370
53-0000	Transportation and Material Moving Occupations	43,410	\$10.52	\$8.90	\$21,890	\$18,510

Source: PR Department of Labor and Human Resources. Occupational Employment Statistics (OES)

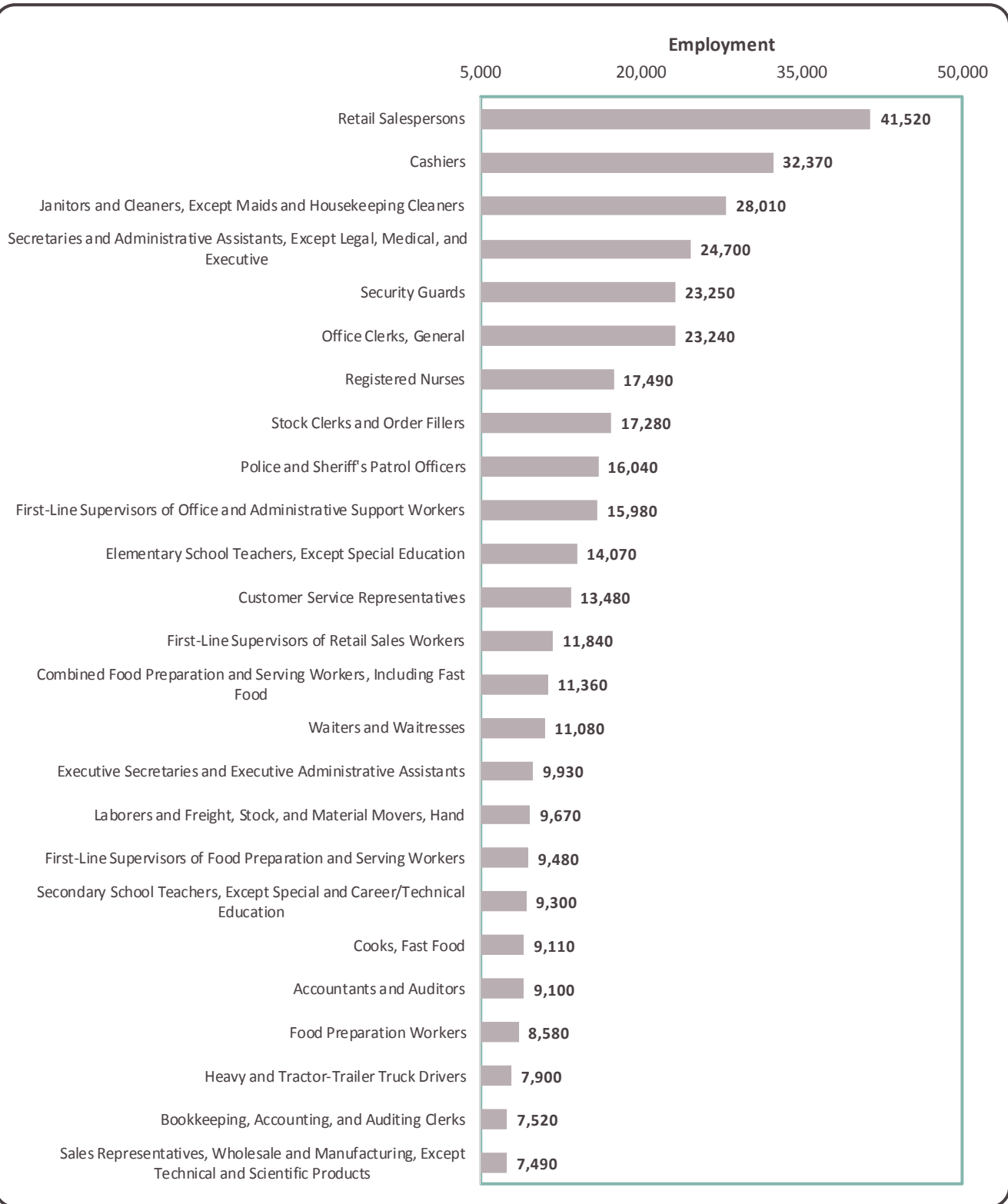
The top 25 highest employment and paying occupations are shown in the next charts.

Figure 22
Top 25 Highest Paying Occupations, 2015



Source: PR Department of Labor and Human Resources. Occupational Employment Statistics (OES)

Figure 23
Top 25 Highest Employment Occupations, 2015



Source: PR Department of Labor and Human Resources. Occupational Employment Statistics (OES)

VI. Occupational Skills & Research

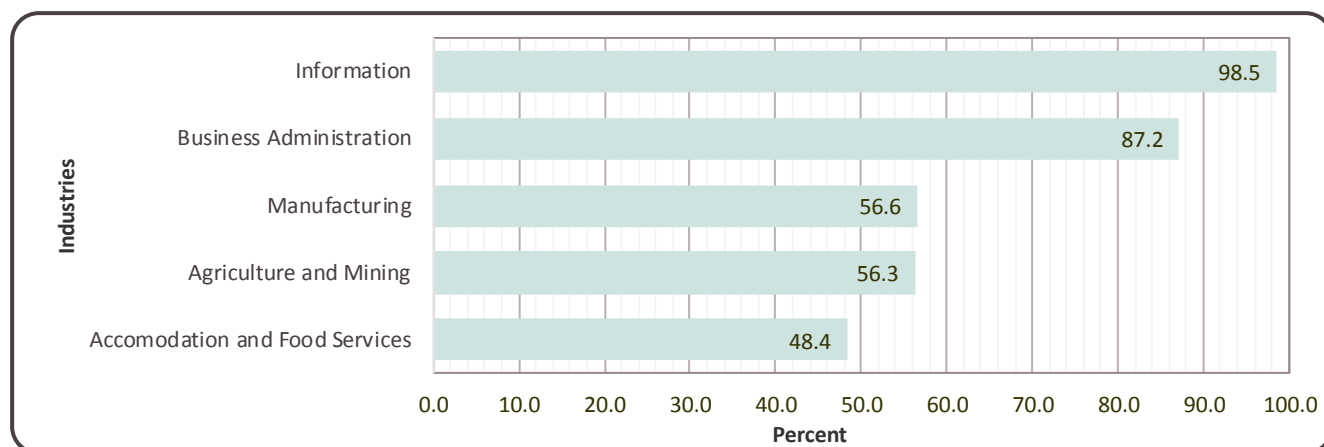
This section presents the results of the Occupational Skills and Research Survey of the Puerto Rico Bureau Labor Statistics. It presents skills on demand by employers in Puerto Rico. Of the entire universe of employers, 31.0% informed that they had recruited at least one new employee between April of 2013 and March of 2014. Of the recruited employees, 24.9% were not required to present any evidence of a specific level of education. However, 31.2% of those recruited at the end of the time period had a high school diploma or its equivalent, while 25.2% had a Bachelor degree.

A. Rate of Overqualification

The rate of overqualification, equivalent to the rate of those most recently hired with a higher academic level to that required by the job vacancy, reached 38.4%. This rate reflected an increase of 7.2 percentage points when compared with that of the previous year (45.6%).

The industry with the highest rate of overqualification was Information, where 98.5% of the recruited employees had more education that the one required by the job vacancy, followed by Business Administration with 87.2%.

Figure 24
Top 5 Industries with Highest Rate of Overqualification - 2014



Source: Puerto Rico Department of Labor: Occupational Skills & Research Division.

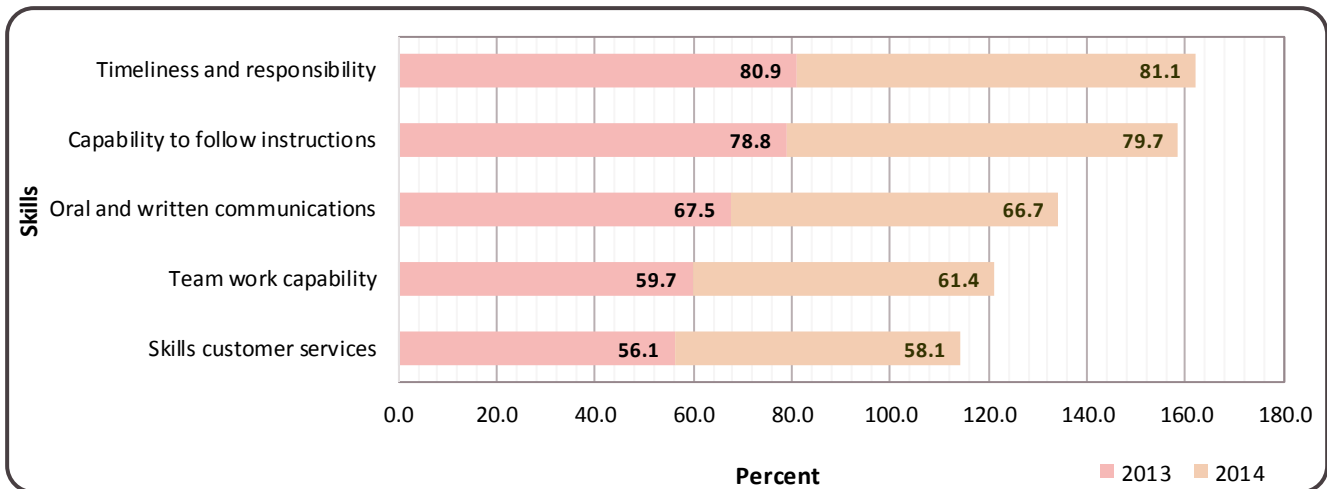
B. Rate of Contracted Hires

The rate of contracted hires for the month of March 2014 was 1.5% and the rate of separation was 1.4%, while for March of 2013, the rate was 1.9% and 1.5% respectively. Of the total amount of those hired in March 2014, 16.8% were part-time workers (less than 28 hours per week), and for March 2013 was 17.9%. Health plans were offered by 24.4% of employers.

C. Job skills with most demand

Timeliness and responsibility, followed by the Capability to follow instructions were the job skills with most demand and most important to employers. The same were selected for the year 2014 by 81.1% and 79.7%, respectively.

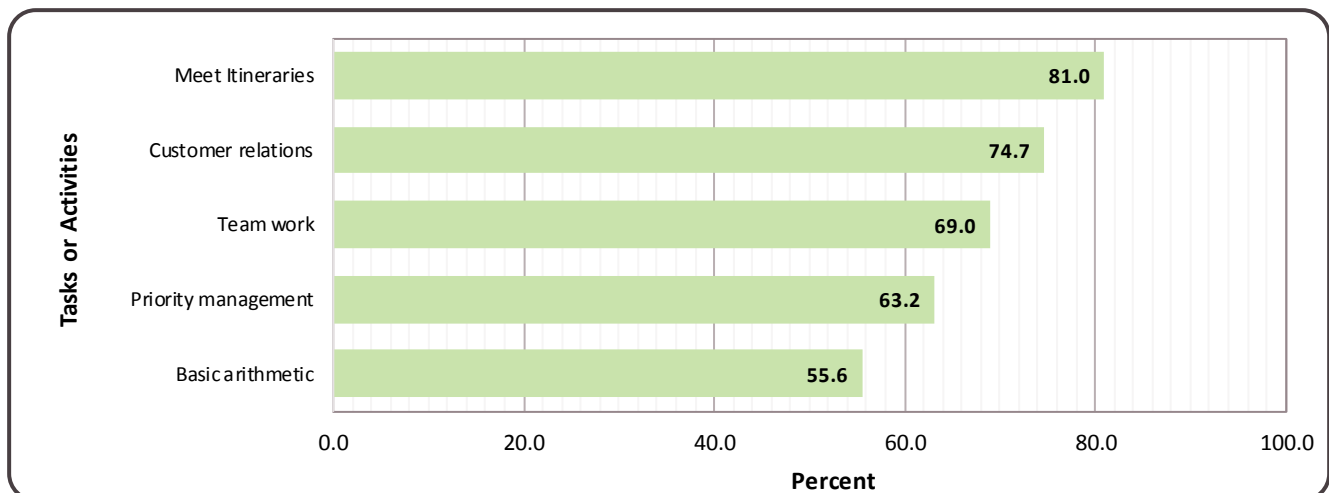
Figure 25
Top 5 Higher Demand Skill, 2013-2014



Source: Puerto Rico Department of Labor: Occupational Skills & Research Division.

The five (5) tasks or activities mostly required of a new recruit, and the percent of employers requiring them for 2014 were as follows:

Figure 26
Top 5 Tasks or Activities Mostly Required of a New Recruit - 2014



Source: Puerto Rico Department of Labor: Occupational Skills & Research Division.

D. Vacancy rate

The vacancy rate, defined as the number of jobs vacant at the moment of answering the questionnaire, as a percent of the total universe, was 4.6%. This rate reflected an increase of 2.6 percentage points when compared to that of the previous year (2.0%). Of the total of employers that answered the questionnaire, 8.2% informed that they had vacant jobs; and of these, 47.5% found difficulty in trying to fill them.

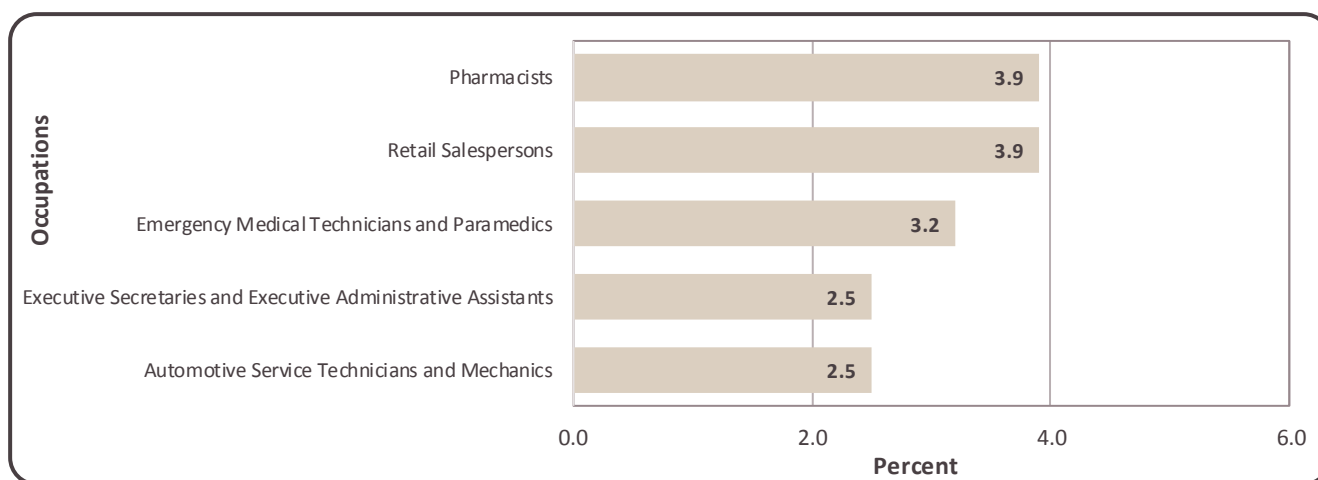
The highest vacancy rate corresponded to the Public Administration industry with 14.6%, followed by Educational Services with 9.1%. Among the establishments that reported having vacant jobs, the industries of Information (66.7%) and Professional, Scientific, and Technical Services (61.5%) registered the highest percentage rate of new vacant jobs. During the previous year, the industries with the highest percentage rate of new jobs were Arts, Entertainment and Recreation (79.5%) and Administrative and Support Services (57.2%).

The Administrative and Support Service and Educational Services industries was the one that reflected the highest percentage rate of establishment with vacancies hardest to fill with 83.3% and 73.9%, respectively. In 2013, the Information industry was the one that reported the highest percentage rate of establishment with vacancies hardest to fill. Within the occupations the Pharmacists (3.9%) and Retail Salespersons (3.9%), they reflected the highest percentage rate as the vacancies hardest to fill.

Figure 27

Top 5 Occupations with the Rate of Vacancies Hardest to Fill - 2014

Source: Puerto Rico Department of Labor: Occupational Skills & Research Division.



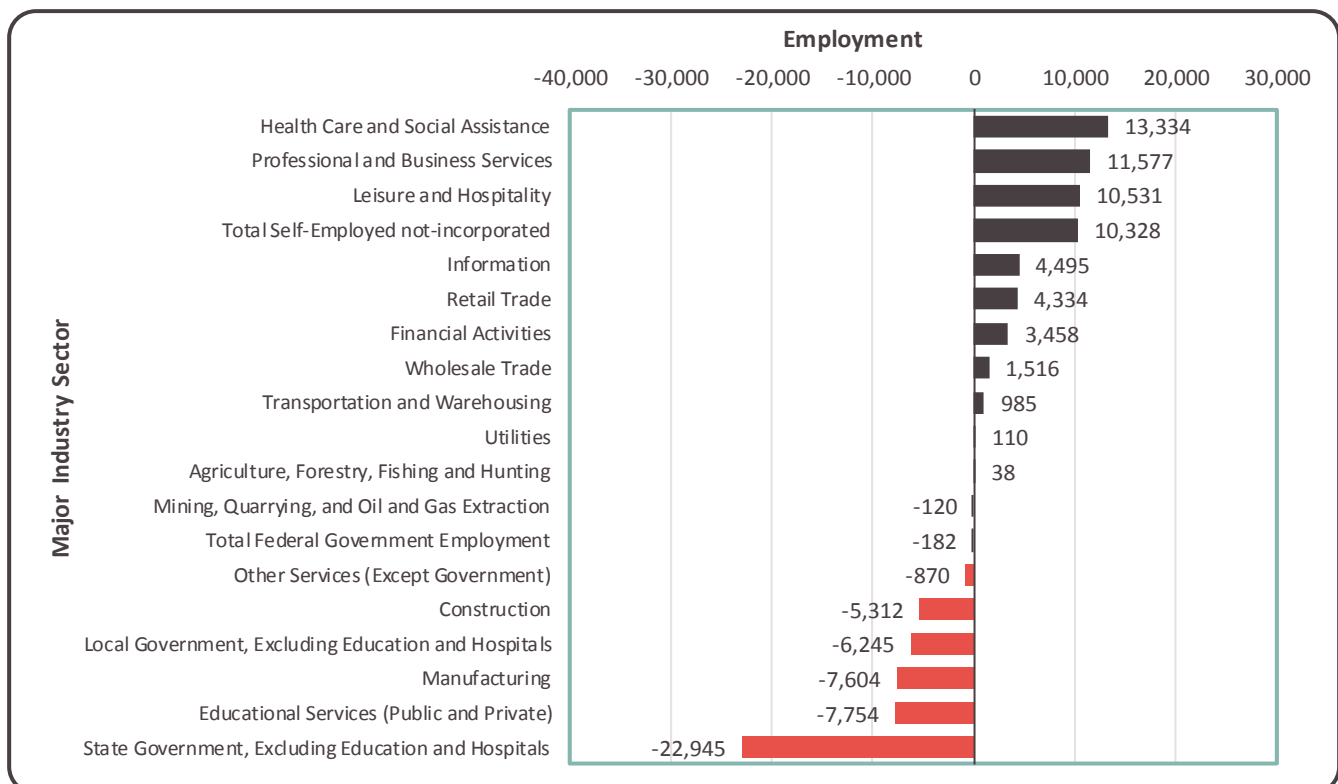
VII. Long Term Industry Projections 2014-2024

A. Employment by Industry

Industry projections for the 2014-2024 period indicate an increase of 9,674 new jobs. This increase is mainly expected in the Service Providing sector with 1.56 percent of job growth. The industry sector with the highest gain was Health Care and Social Assistance sector, showing the highest increase in the Ambulatory Health Care Service industry. Professional and Business Services; Leisure and Hospitality; and Not Incorporated Self Employed; follow as the major industry sectors with the highest increment in 2024. Service-providing industries are Wholesale and Retail Trade; Transportation and Warehousing; Utilities; Information; Financial Activities; Professional and Business Services; Education and Health Services; Leisure and Hospitality; Other Services; and Government. The Government sector showing a higher decrease of 29,372, due to losses in State Government projected at 22,945.

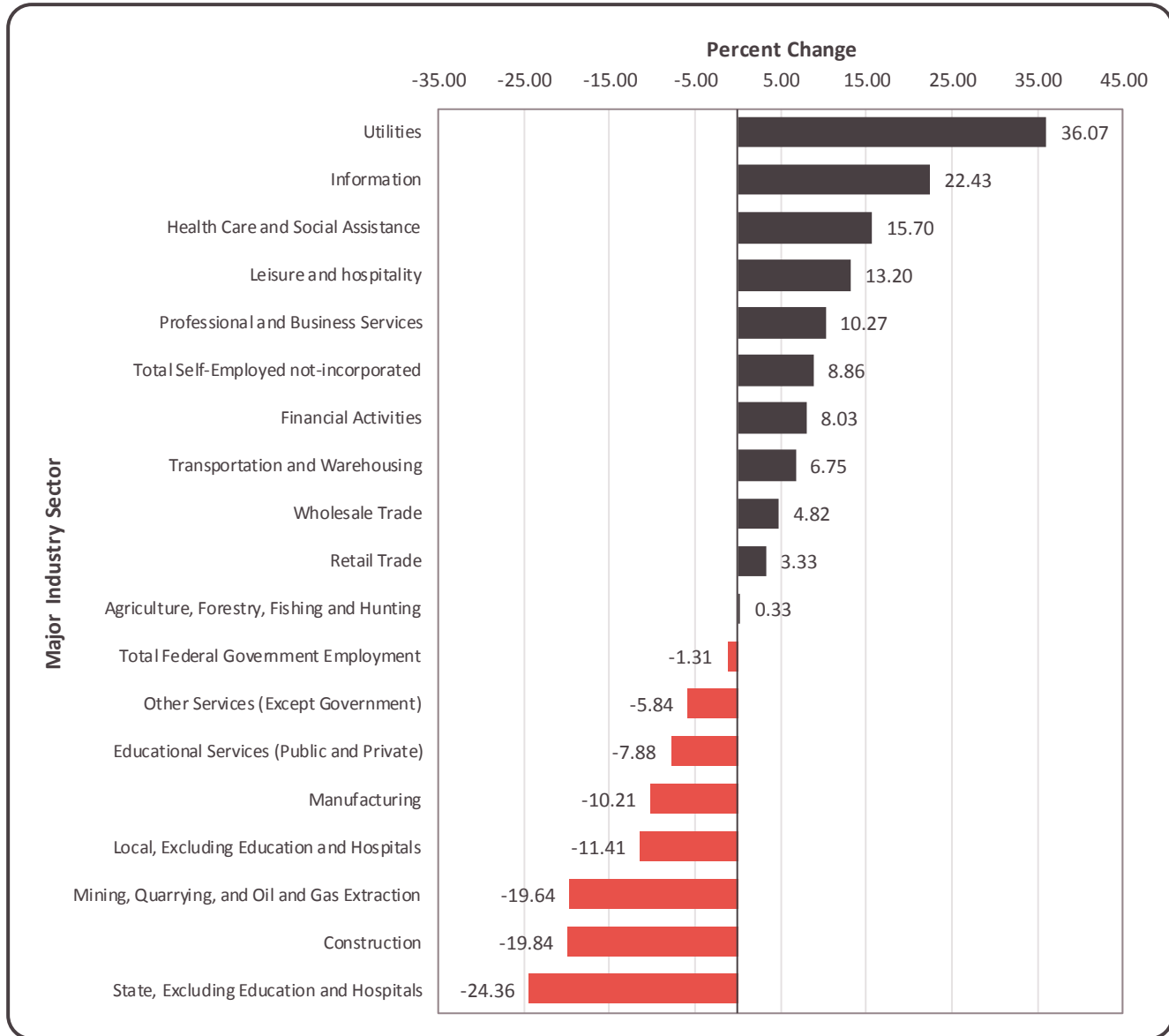
The Goods Producing industries are also projecting a loss in employment of 12,998 jobs. The Manufacturing and Construction industries are expected to decrease by 7,604 and 5,312 jobs respectively in 2024. The only major industry sector: Agriculture, Forestry, Fishing and Hunting; is expected to slight increase by 38 jobs for 2024.

Figure 28
Numeric Change in Employment by Major Industry Sector
Projected 2014-2024



Source: Puerto Rico Department of Labor: Research & Statistics Division.

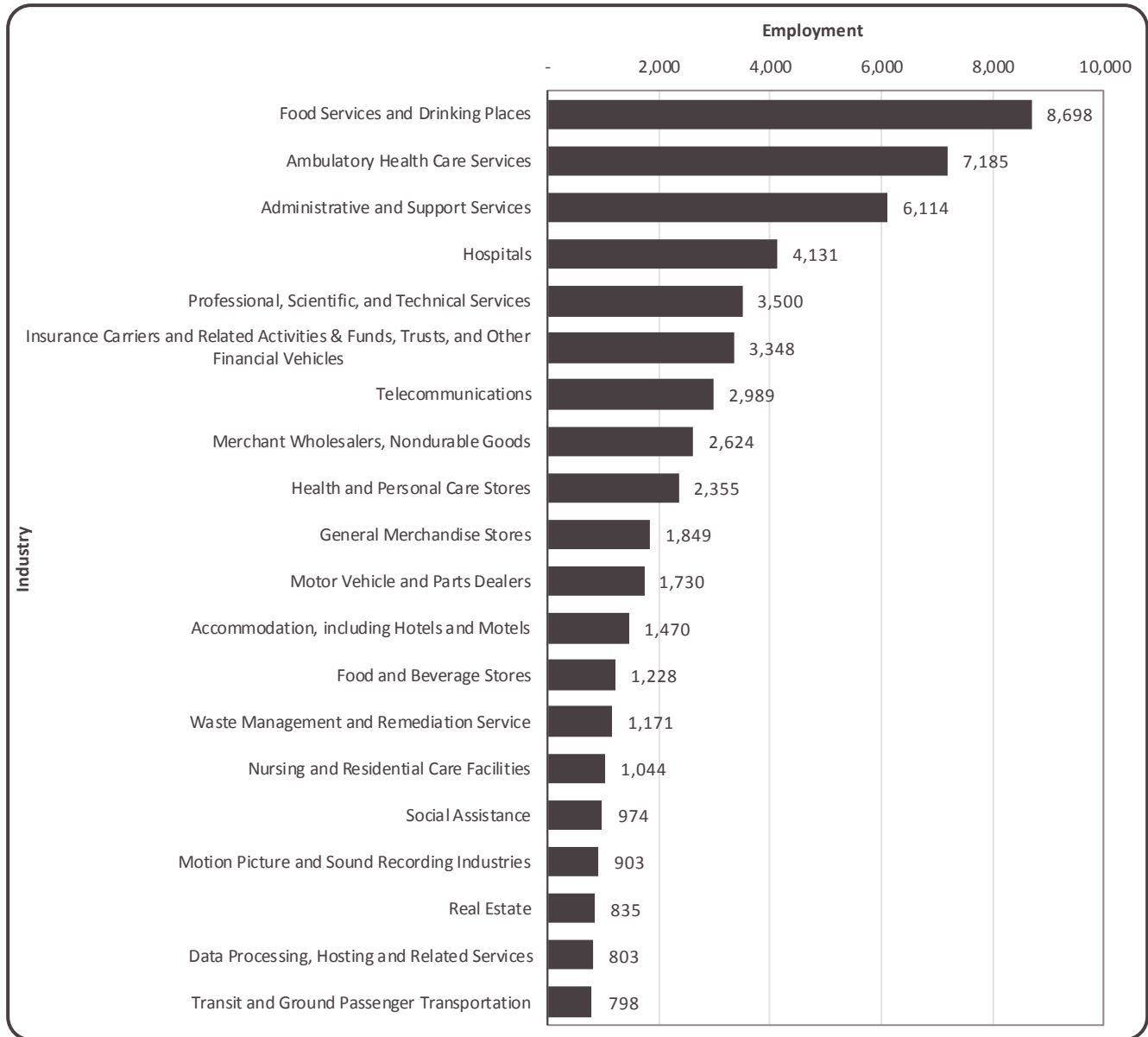
Figure 29
Percent Change in Employment by Major Industry Sector
Projected 2014-2024



Source: Puerto Rico Department of Labor: Research & Statistics Division.

The above graph shows the rate at which jobs are expected to be added or lost over the 2014-2024 period in each major industry sector. The Utilities sector and the Information sector are projected to continue growing with 36.07 percent and 22.43 percent.

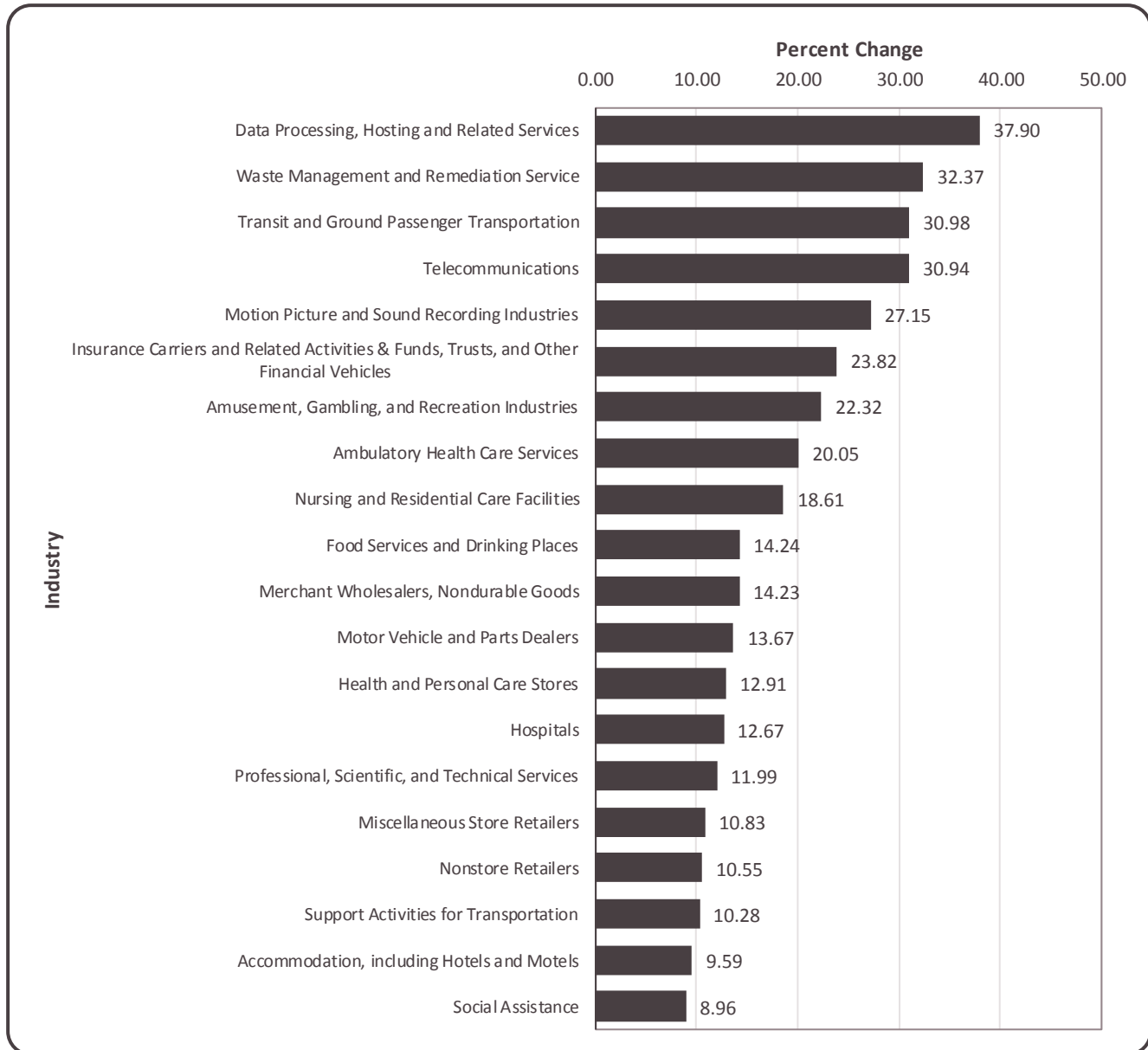
Figure 30
Most New Jobs - Numeric Growth in Employment by Detailed Industry
Projected 2014-2024



Source: Puerto Rico Department of Labor: Research & Statistics Division.

The industries above are projected to add the most new jobs between 2014 and 2024. Food Services and Drinking Places is the industry with the highest projected employment. This subsector prepare meals, snacks, and beverages to customer order for immediate on-premises and off-premises consumption. There is a wide range of establishments in these industries. Some provide food and drink only; while others provide various combination of seating space, waiter/waitress services, and incidental amenities, such as limited entertainment. Industries in the Health Care sector and Social Assistance as: Ambulatory Health Care Services; Hospitals; Health and Personal Care Stores; Nursing Residential Care Facilities; and Social Assistance are expected to gain the most new jobs.

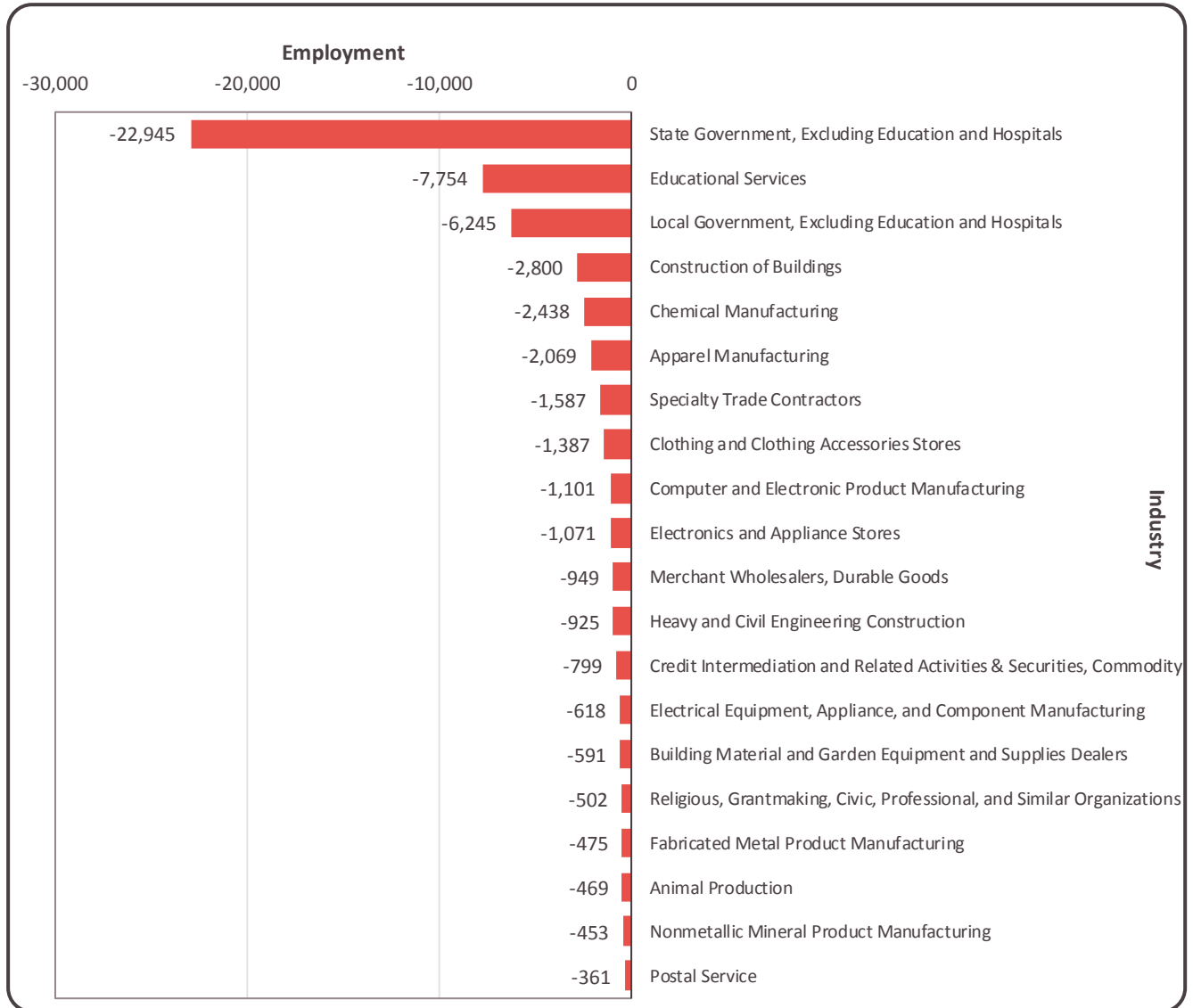
Figure 31
Fastest Growing Industries - Percent Growth in Employment by Detailed Industry
Projected 2014-2024



Source: Puerto Rico Department of Labor: Research & Statistics Division.

This chart shows how fast industries are expected to add jobs over the 2014-2024 decade. The top industry is Data Processing, Hosting, and Related Services. This subsector group establishments provide the infrastructure for hosting and/or data processing services. Waste Management and Remediation Services subsector group establishments engaged in the collection, treatment, and disposal of waste materials. The Transit and Ground Passenger Transportation subsector include a variety of passenger transportation activities, such as urban transit systems; chartered bus, and interurban bus transportation; and taxis.

Figure 32
Most Jobs Losses - Numeric decline in Employment of Workers by Detailed Industry
Projected 2014-2024

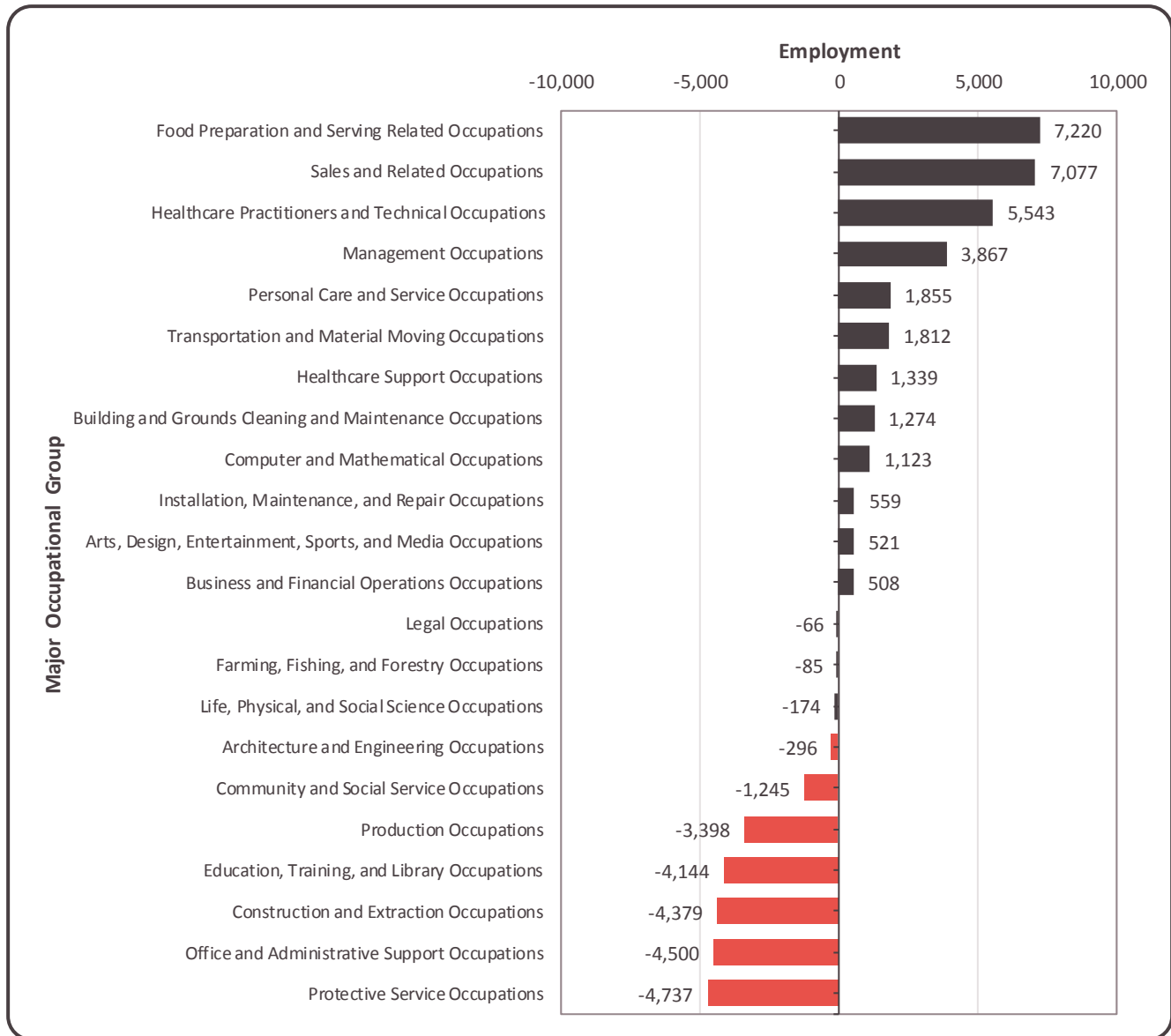


Source: Puerto Rico Department of Labor - Research & Statistic Division.

These industries are projected to have the largest decline in the number of jobs between 2014 and 2024. Most declining industries are related to Manufacturing, expecting 7,604 less jobs in 2024. The industries with the largest job loss were State Government with 22,945 less jobs and Educational Service with 7,754 less jobs in 2024. These industries have been declining since 2006 due to Puerto Rico's economic restructuring.

B. Employment by Occupation

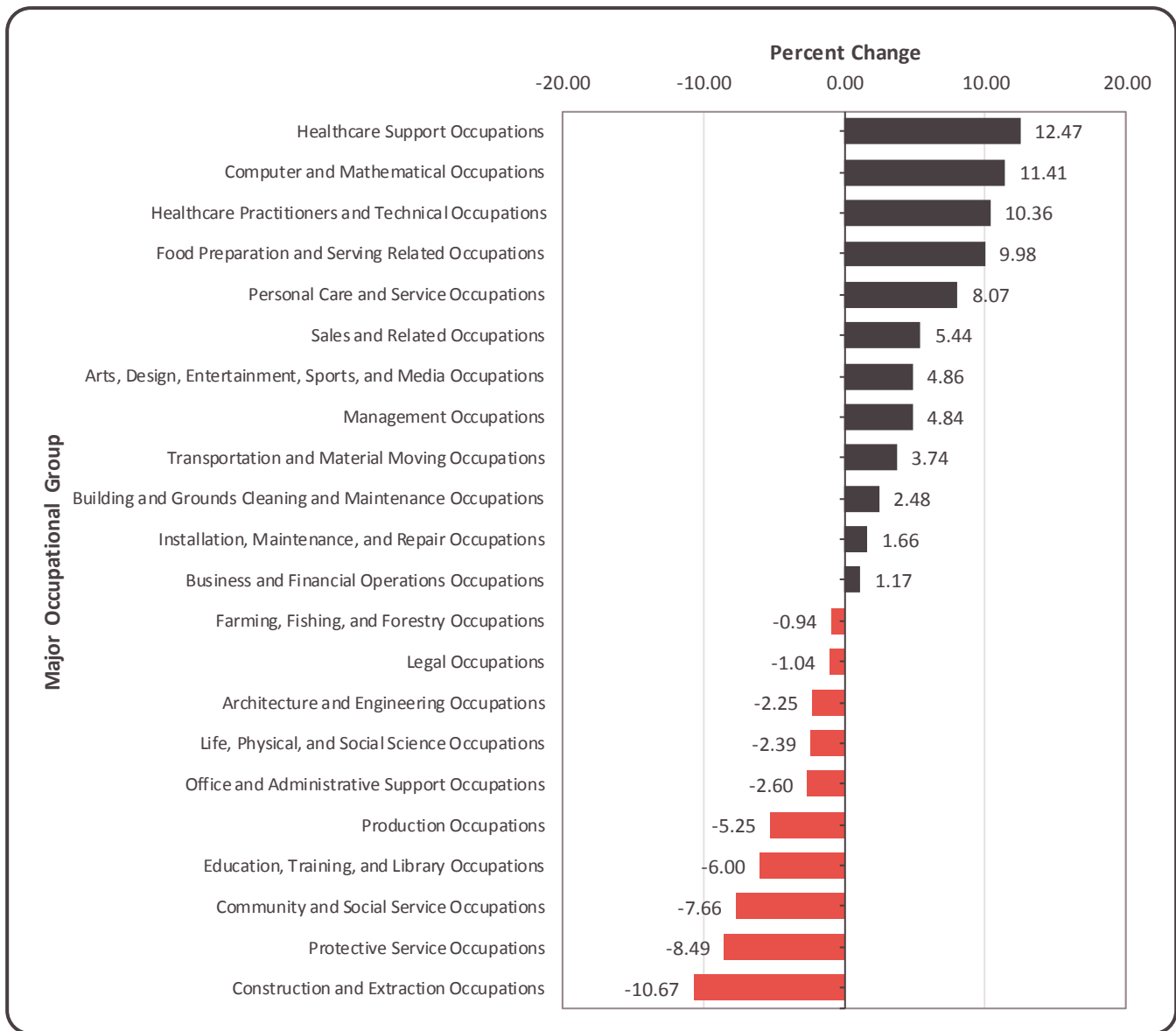
Figure 33
Numeric Change in Employment by Major Occupational Group
Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

Projected numeric change in employment is the number of new jobs expected to be added to each major occupational group between 2014 and 2024. The group with the highest increase is Food Preparation and Serving Related Occupations with 7,220 new jobs in 2022. Mainly due to the decrease of the occupation of Combined Food Preparation and Serving Workers, Including Fast Food. The major group that expected a decrease is the Protective Service Occupation with 4,737 jobs in 2024. Mainly due to the decrease of the occupation of Police and Sheriff's Patrol Officers.

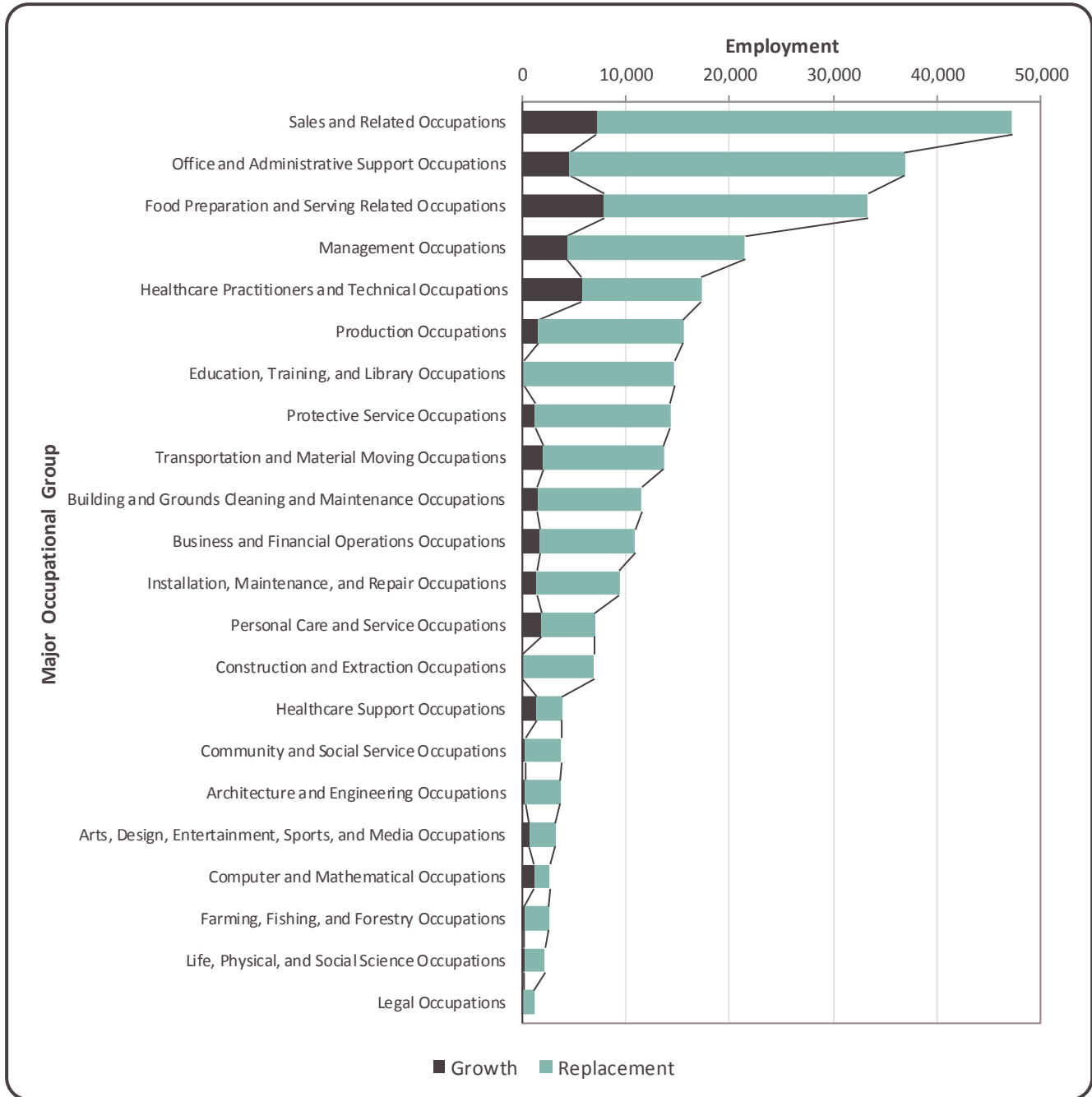
Figure 34
Percent Change in Employment by Major Occupational Group
Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

Projected percent change in employment measures the rate of expected growth or decline for each major occupational group between 2014 and 2024. The occupational group with the highest projected growth is the Healthcare Support Occupations. Mainly due to the increase of the occupation of Physical Therapist Assistants occupation. The major group that expected a decrease is Construction and Extraction Occupations with 10.67 percent in 2024. Mainly due to the decrease of the occupation of Paving, Surfacing, and Tamping Equipment Operators.

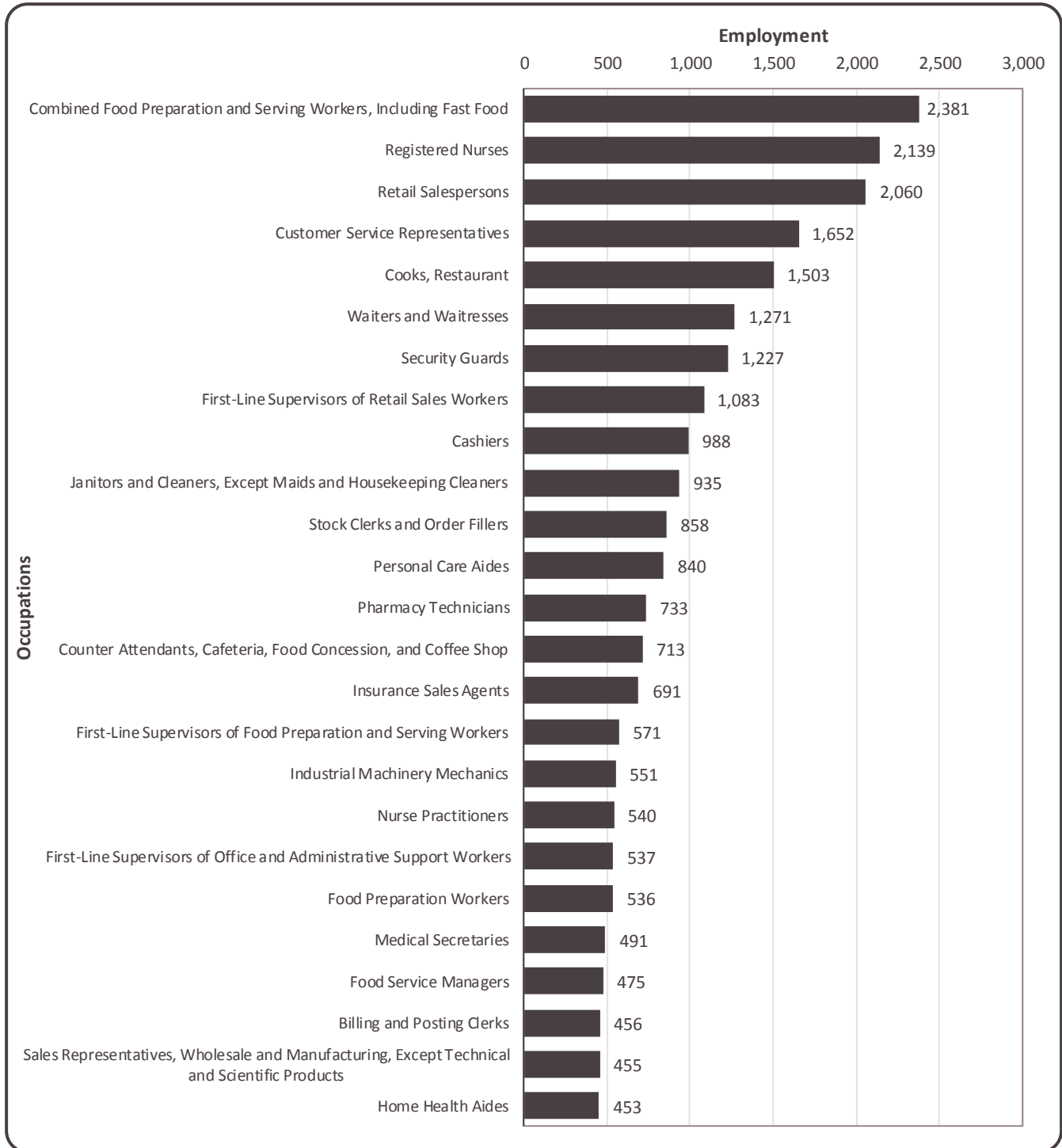
Figure 35
Jobs Openings by Major Occupational Group
Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

This chart shows the number of job openings projected for major occupational groups, for the 2014-24 decade. Openings for new workers occur not only when jobs are added to the economy but also, when current workers leave an occupation permanently. In most of these occupations, the need to replace workers who leave an occupation is projected to create more job openings than those expected from job growth.

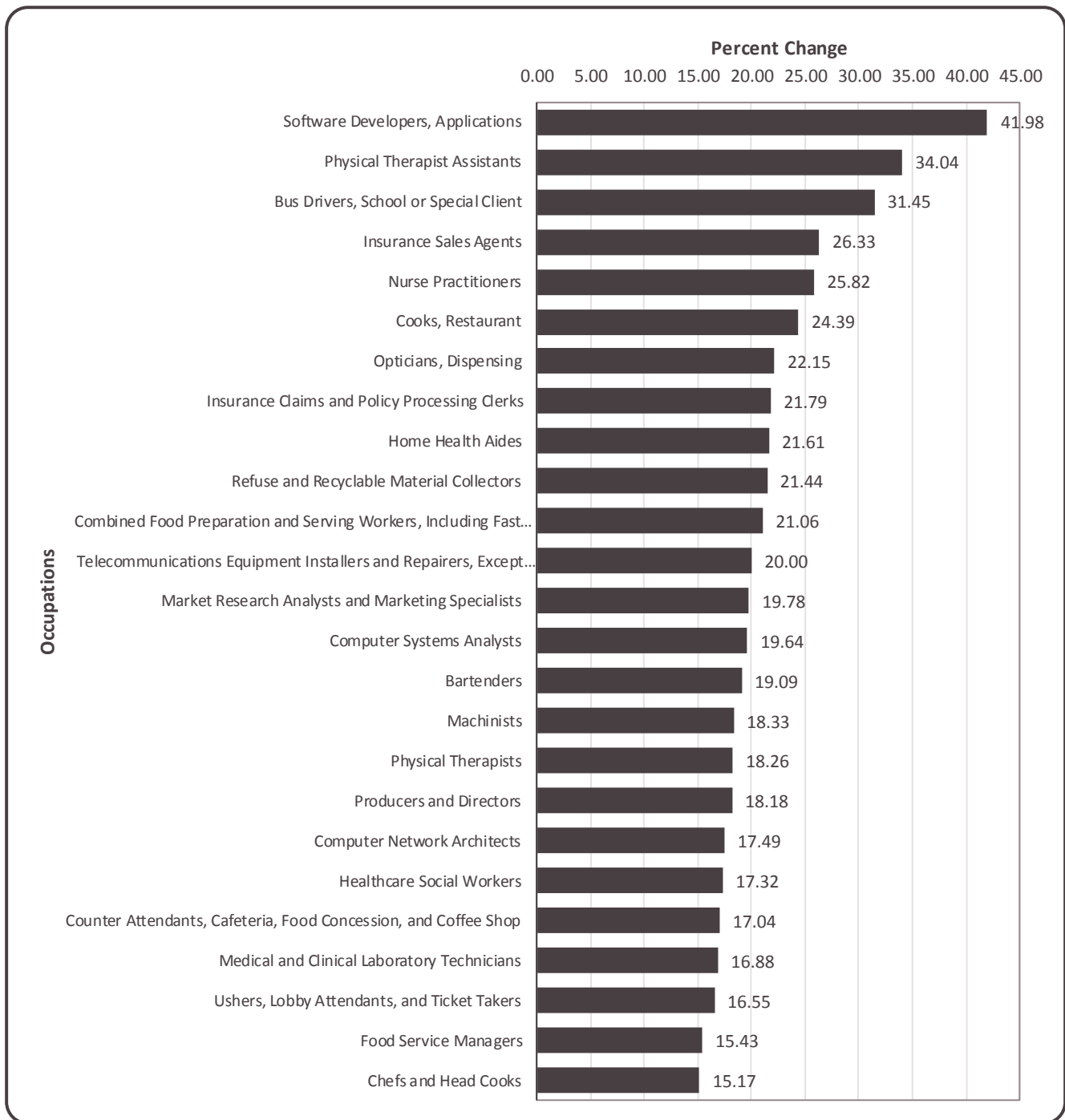
Figure 36
Most New Jobs - Numeric Growth in Employment
Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

Projected numeric growth in employment, measures how many new jobs are expected to be added in each occupation. These 25 occupations are projected to gain the most new jobs from 2014-2024.

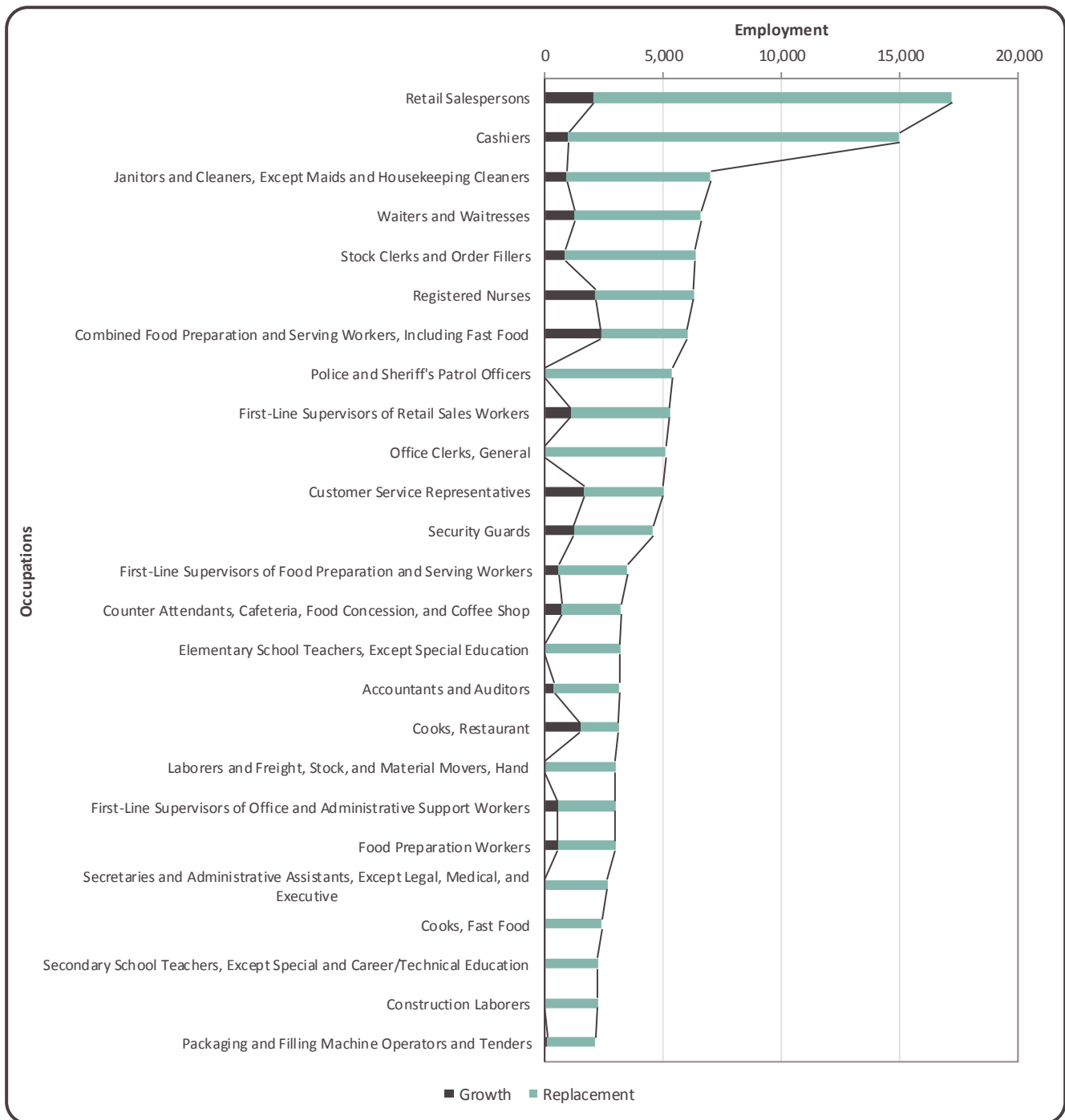
Figure 37
Fastest Growing Occupations - Percent Growth in Employment
Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

Projected percent growth in employment measures how fast an occupation is expected to add jobs. The 25 occupations in the chart are projected to grow the fastest over the 2014-24 decade.

Figure 38
Most Jobs Openings
Projected 2014-2024

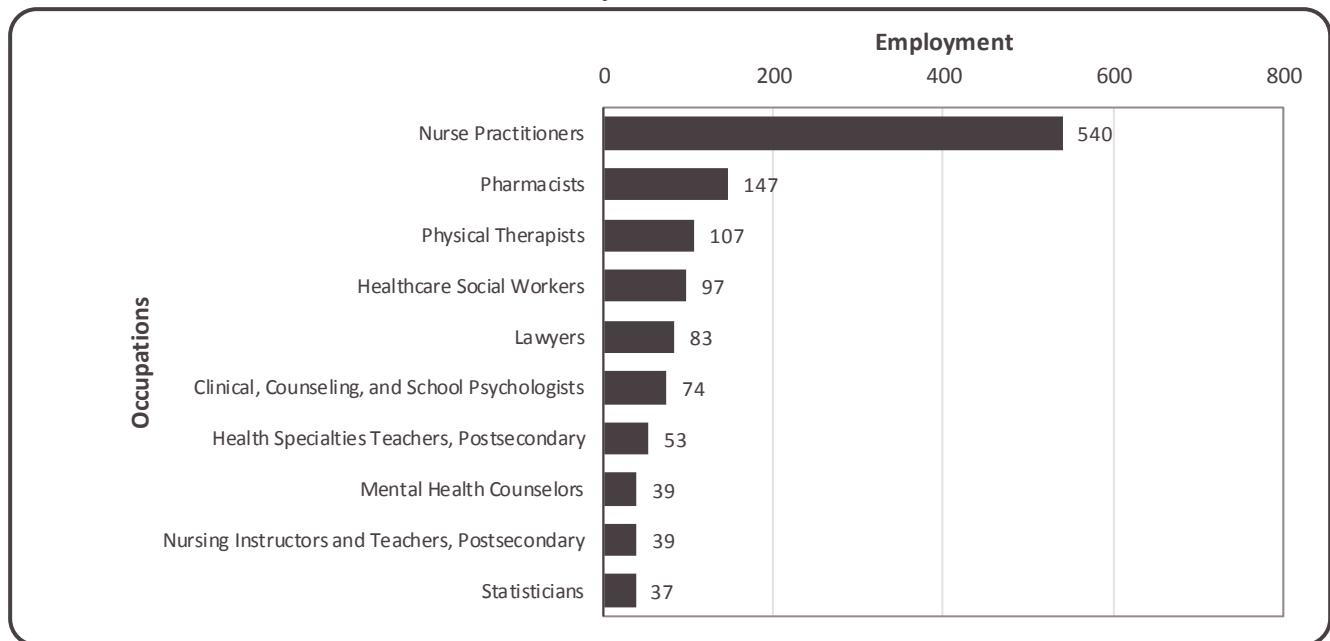


Source: Puerto Rico Department of Labor - Research & Statistic Division.

These occupations are projected to have the most job openings due to growth and need to replace workers that leave the occupation permanently. Many of these are service-related occupations, which are projected to have numerous openings over the 2014-24 decade. For most of the occupations in this chart, the need to replace workers leaving the occupation is projected to create more openings, than those expected from job growth.

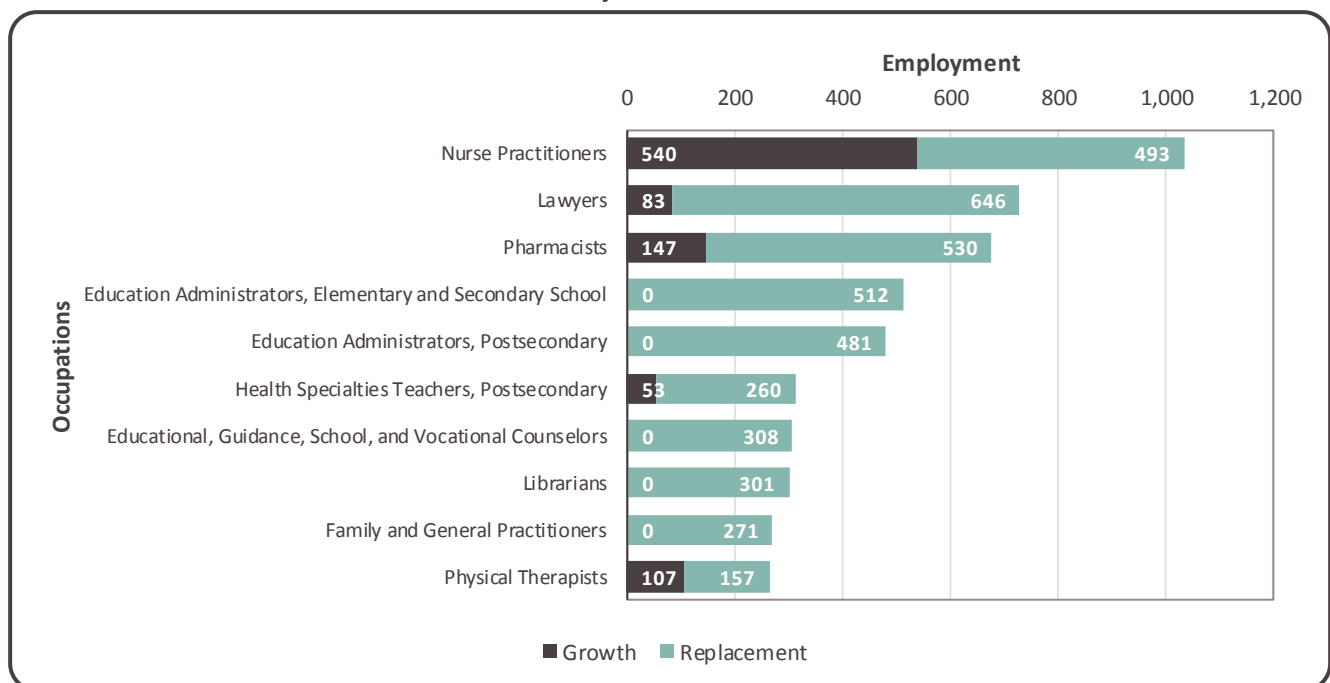
C. Employment by Education

Figure 39
Master's, Doctoral or Professional Degree Gaining the Most New Jobs
Projected 2014-2024



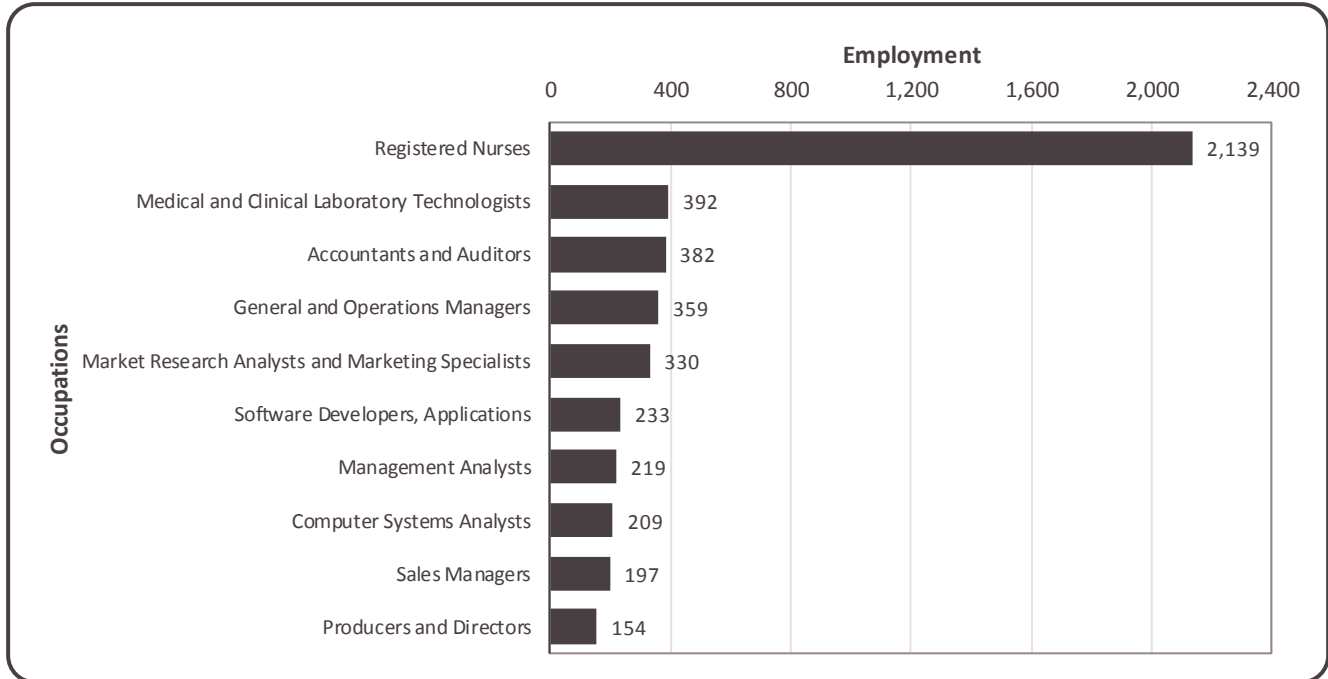
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 40
Master's, Doctoral or Professional Degree Most Openings Occupations
Projected 2014-2024



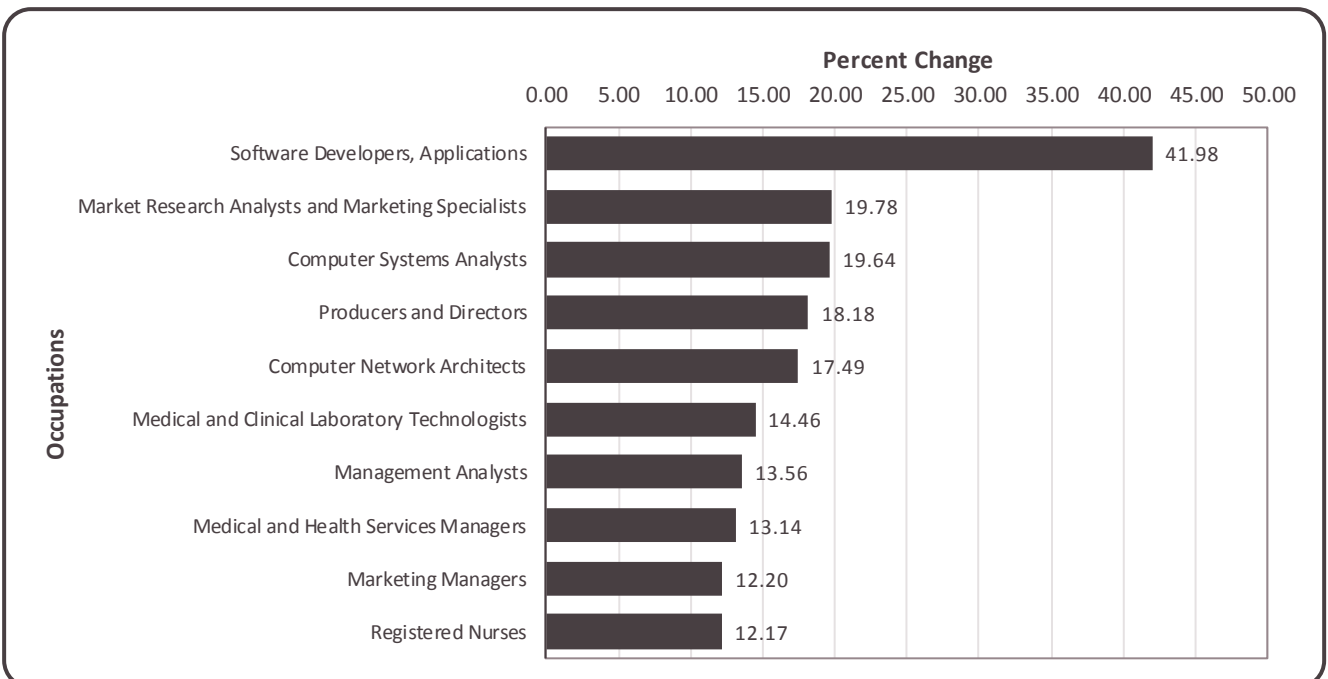
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 41
Bachelor's Degree Gaining the Most New Jobs
Projected 2014-2024



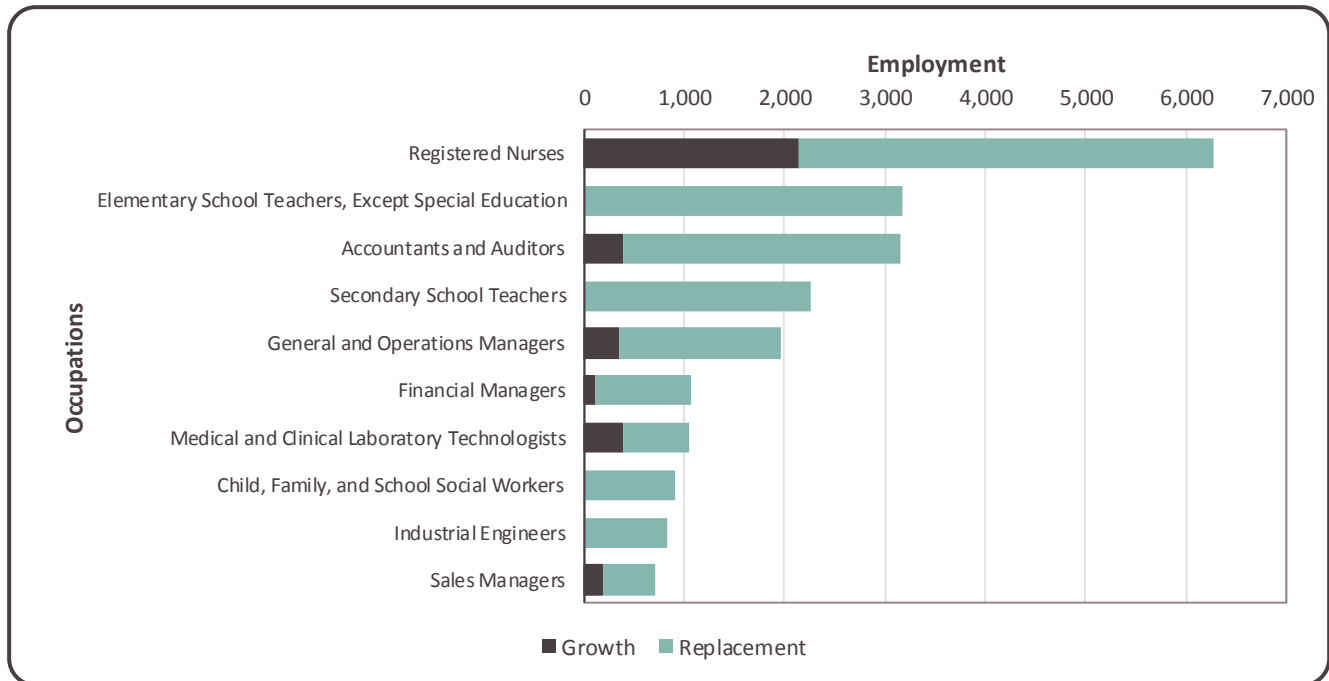
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 42
Bachelor's Degree Occupations with the Highest Growth Rates
Projected 2014-2024



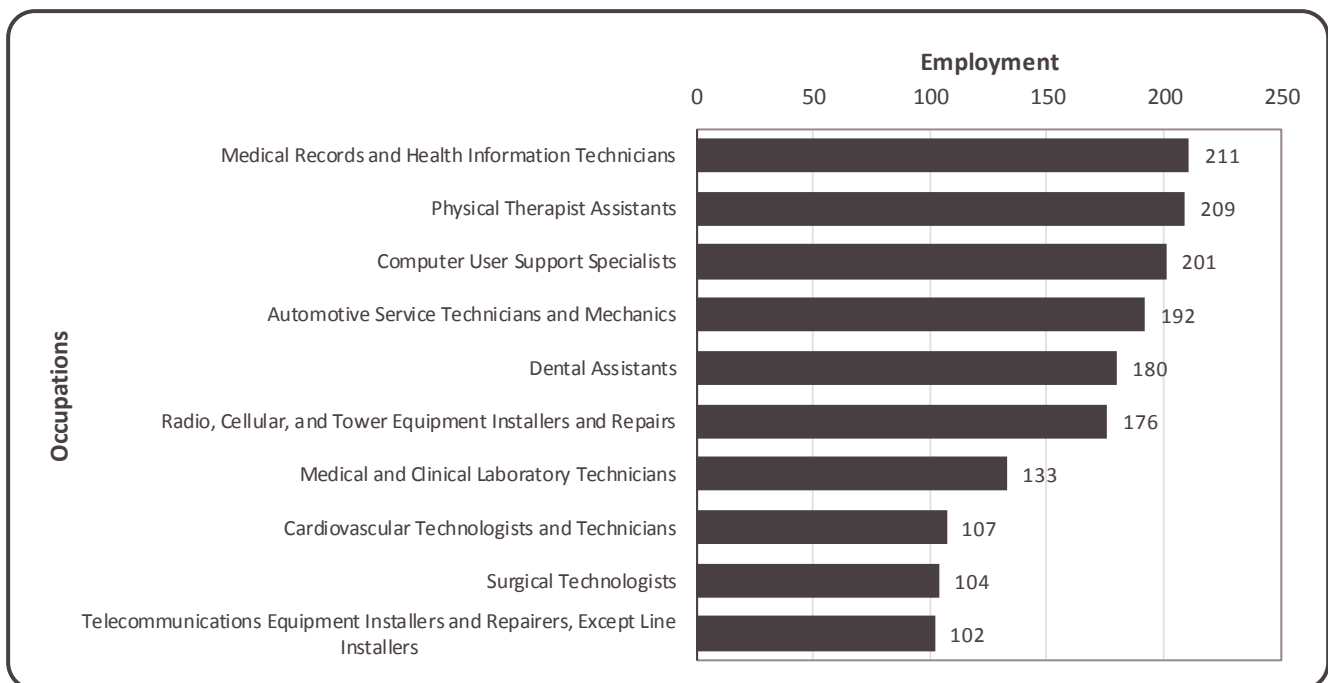
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 43
Bachelor's Degree Most Openings Occupations
Projected 2014-2024



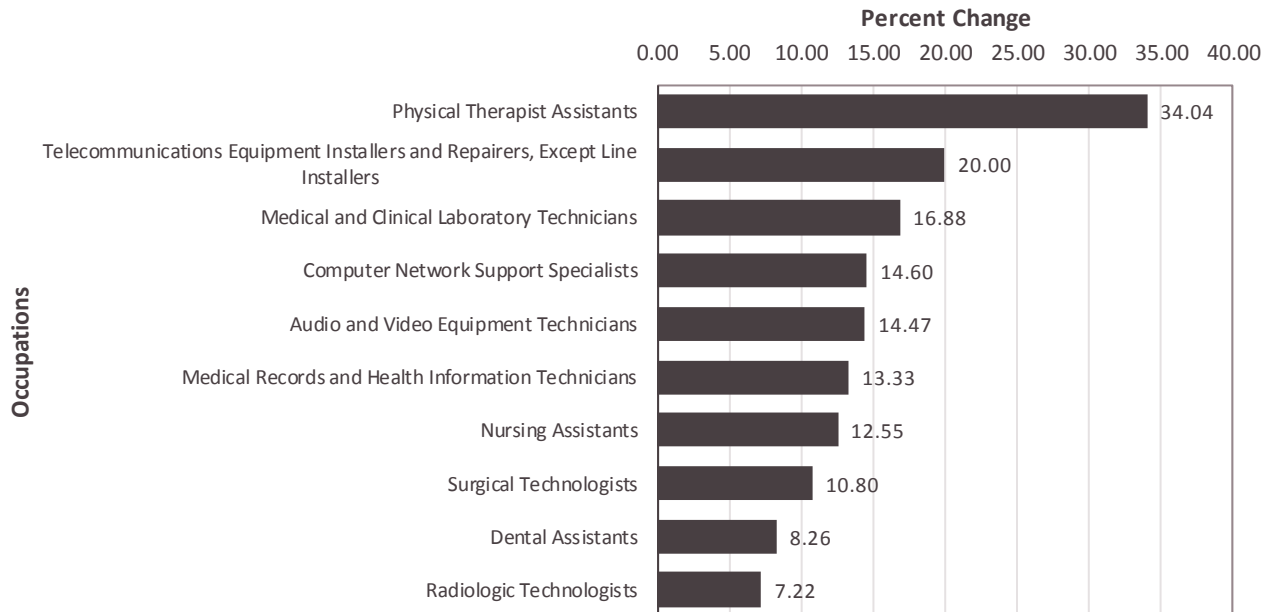
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 44
Associate's Degree, Postsecondary Non-Degree Award or Some College No Degree Gaining the Most New Jobs
Projected 2014-2024



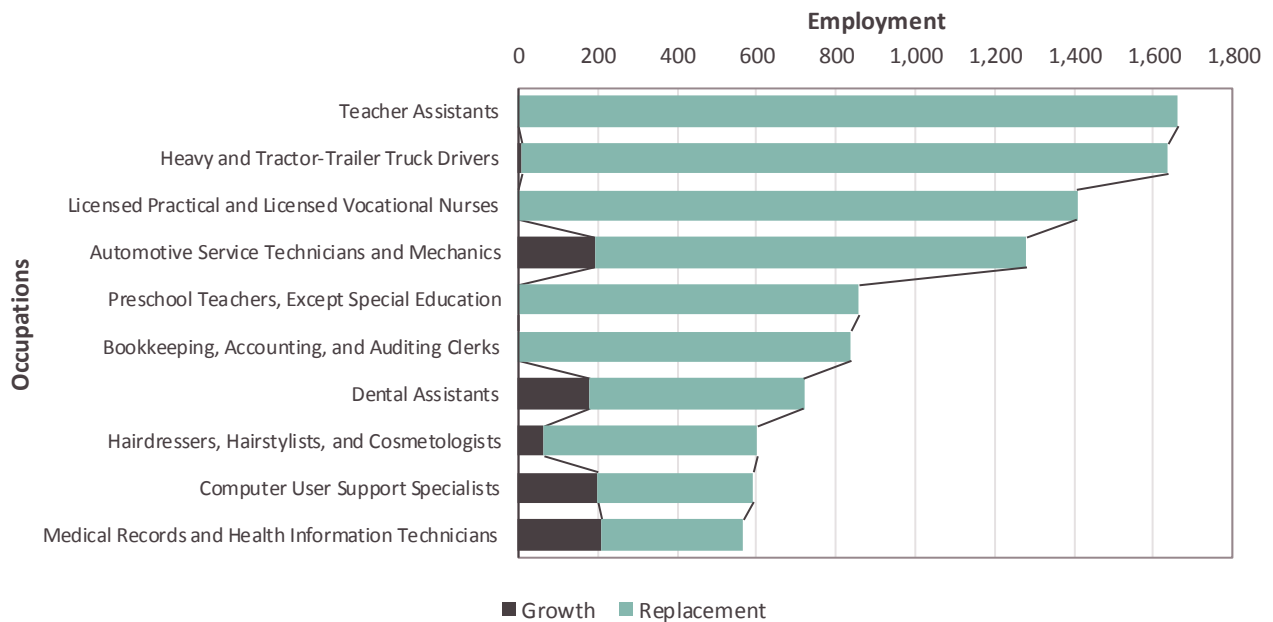
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 45
Associate's Degree, Postsecondary Non-Degree Award or Some College No Degree with the Highest Growth Rates
Projected 2014-2024



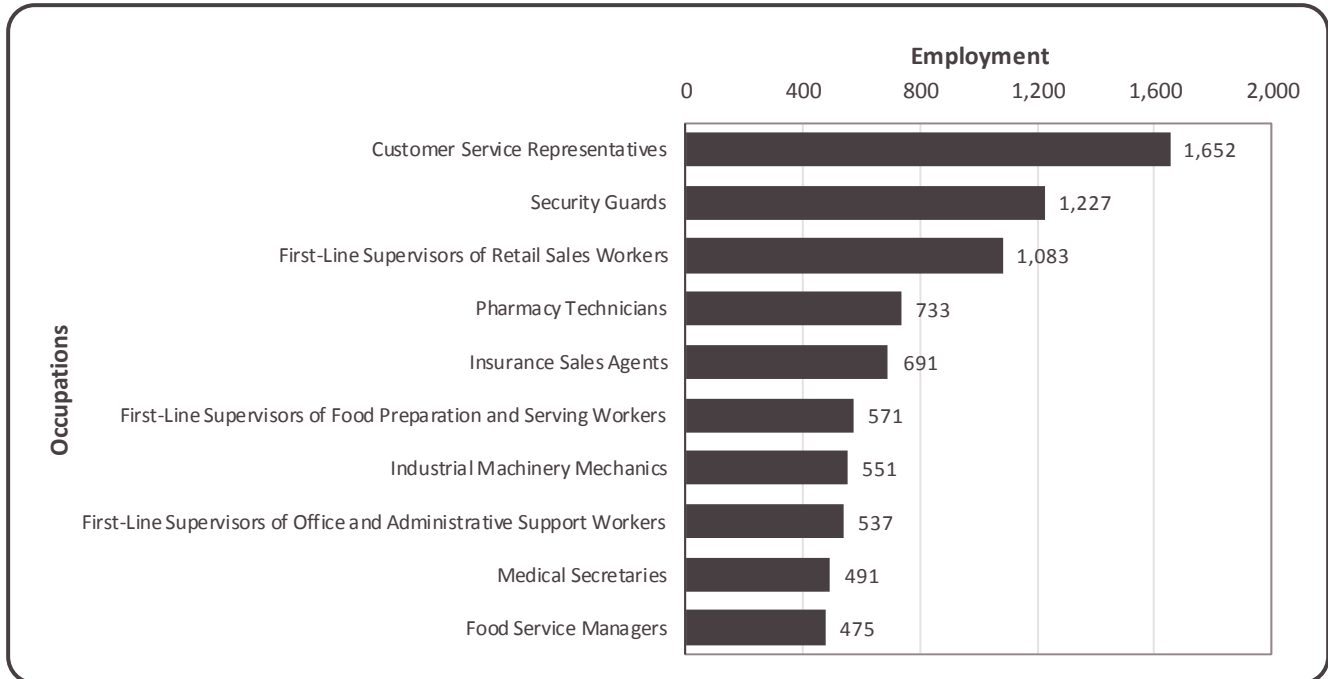
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 46
Associate's Degree, Postsecondary Non-Degree Award or Some College No Degree Most Openings
Projected 2014-2024



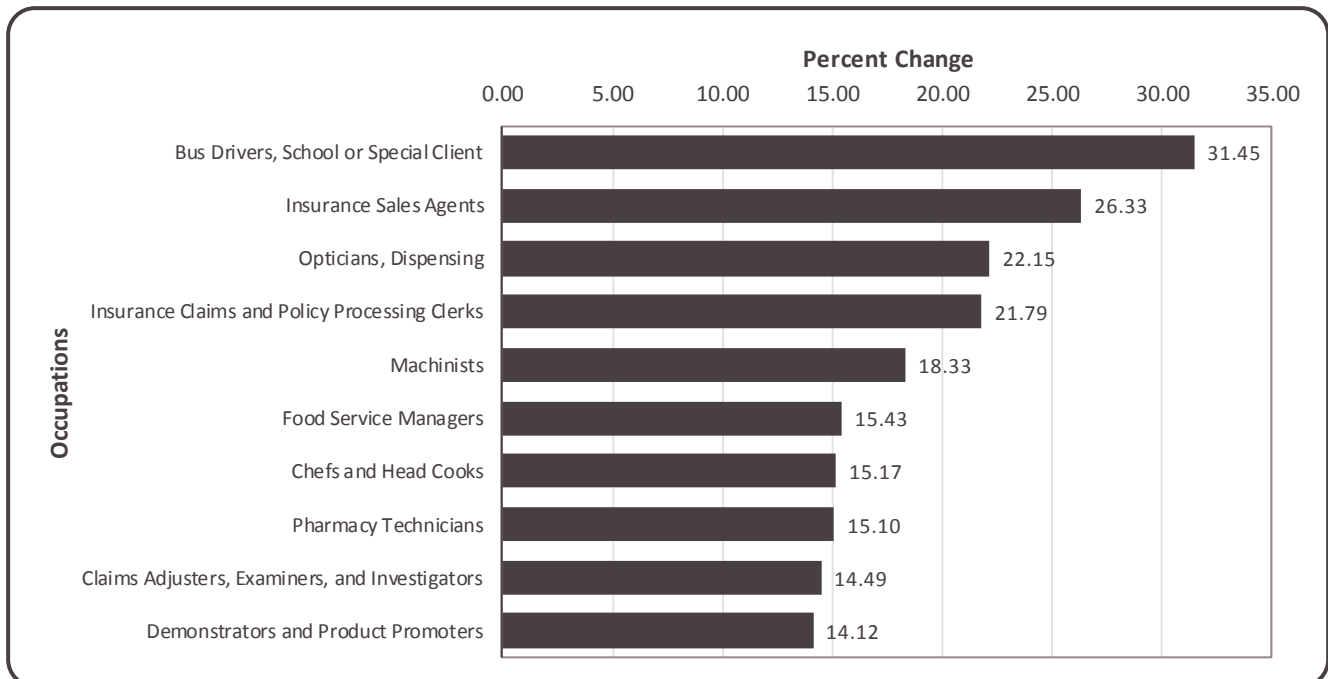
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 47
Occupations Requiring a High School Diploma or Equivalent Gaining the Most New Jobs
Projected 2014-2024



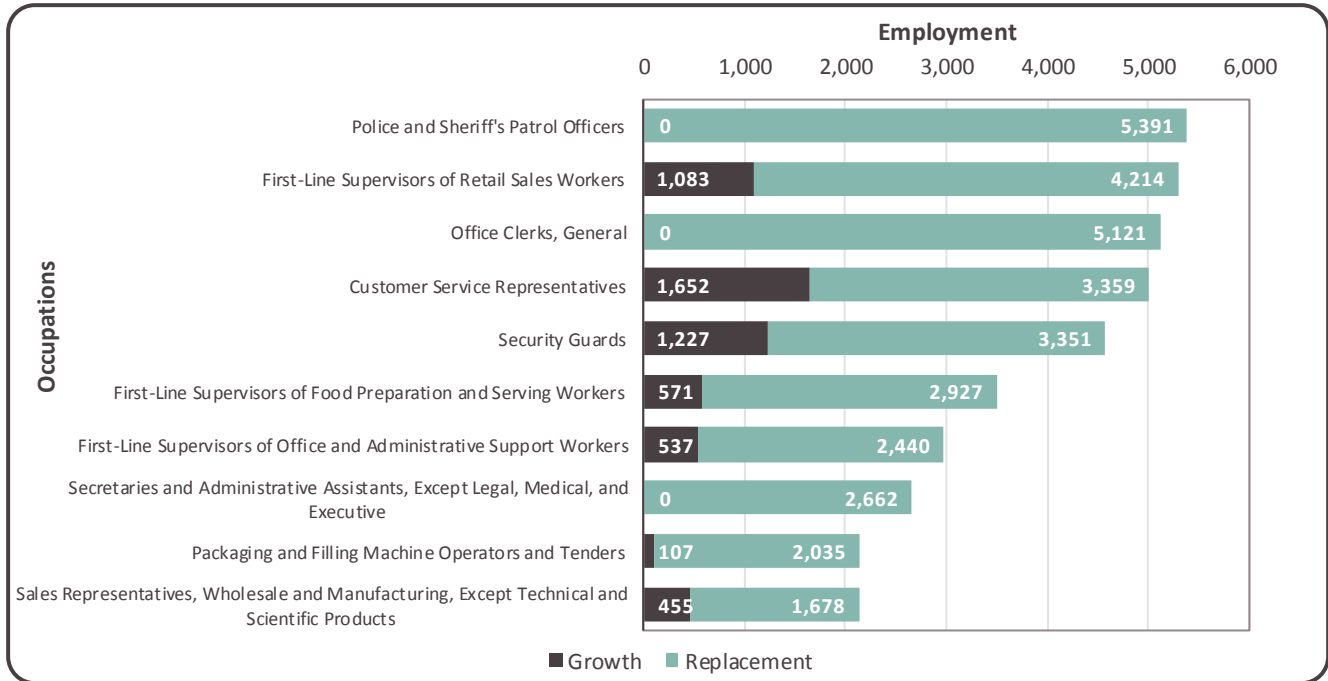
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 48
Occupations Requiring a High School Diploma or Equivalent with the Highest Growth Rates
Projected 2014-2024



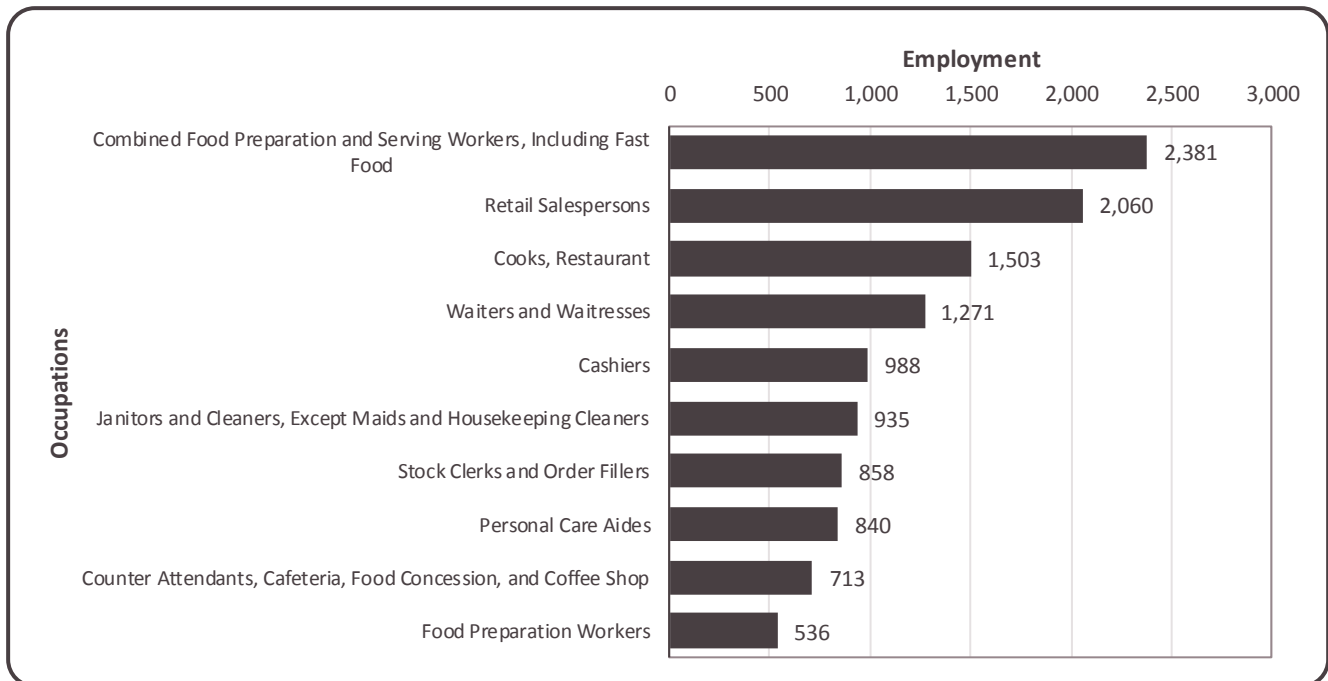
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 49
Occupations Requiring a High School Diploma or Equivalent Most Openings
Projected 2014-2024



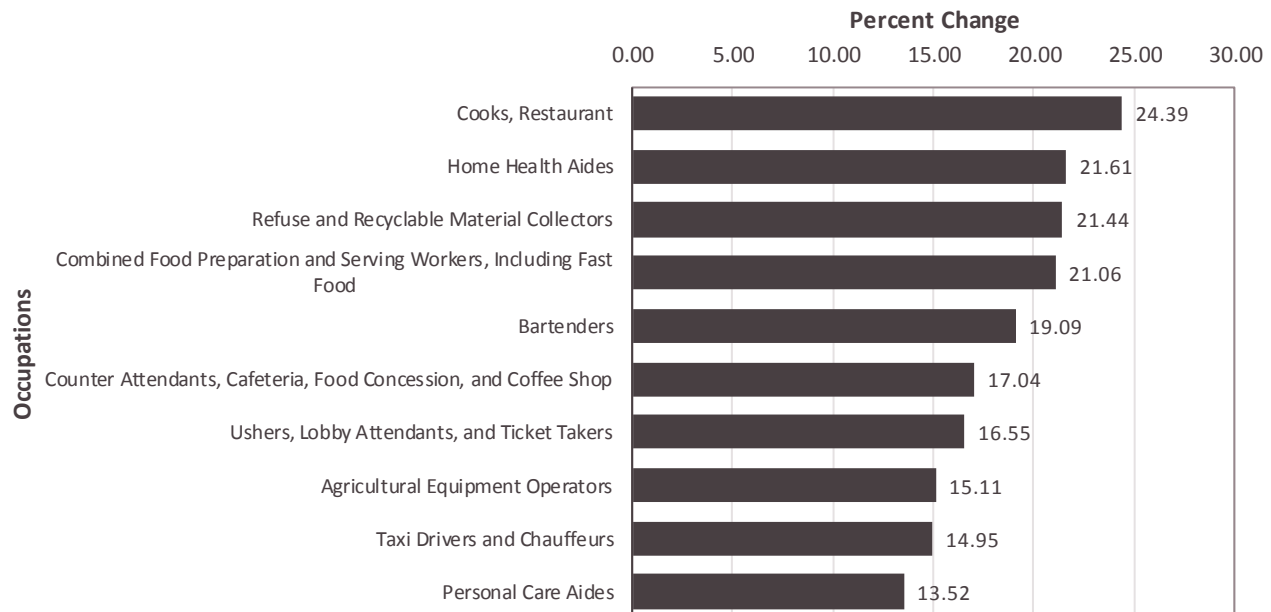
Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 50
Occupations Gaining the Most New Jobs that not Require Formal Education Credentials
Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 51
Occupations with the Highest Growth Rates that not Require Formal Education Credentials
Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

Figure 52
Most Openings Occupations that not Require Formal Education Credentials
Projected 2014-2024

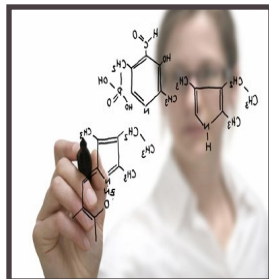
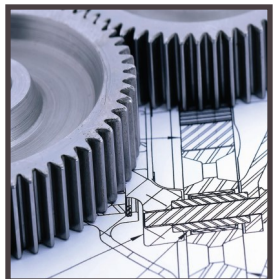


Source: Puerto Rico Department of Labor - Research & Statistic Division.

VIII. Statistics STEM



The occupations or related field of study with the sciences, technology, engineering and math are usually known by the English acronym STEM. It represents a variety of government agencies² that developed the definition of the STEM occupations by using the standard 2010 occupational code system (new occupations will be considered in the 2018 SOC Manual³).



The committee classifies STEM occupations in two groups. The first covers STEM's main occupations that depend on the knowledge about STEM. Each main group is divided into two subgroups.

The main group, the subgroups and the five types of STEM occupations are grouped based on specific tasks related to each of the groups. These may be helpful when planning personal development of an enterprise or agency, human resource departments and job applicants.

MAIN AND SUBGROUPS

1. Science, Engineering, Mathematics and Information Technology Domain

- a. Life and Physical Science, Engineering, Mathematics, and Information Technology Occupations
- b. Social Science Occupations

2. Science - and Engineering-Related Domain

- a. Architecture Occupations
- b. Health Occupations

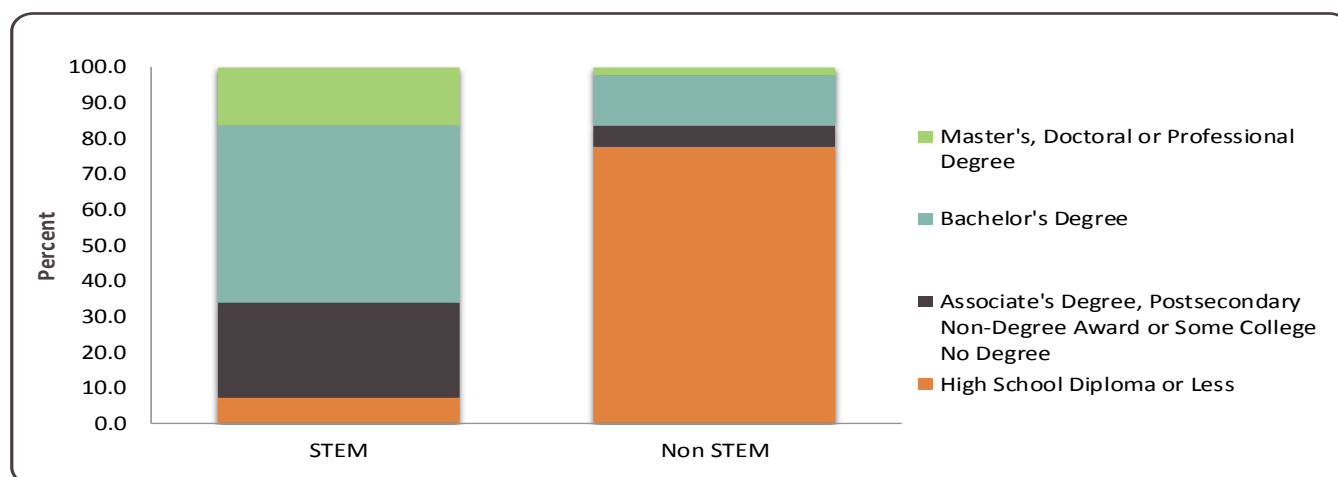
5 types of STEM Occupations:

1. Research, Development, Design, or Practitioner Occupations
2. Technologist and Technician Occupations
3. Postsecondary Teaching Occupations
4. Managerial Occupations
5. Sales Occupations

A. Employment

Employment in all of STEM's occupation in Puerto Rico for 2015 were approximately 86,700. This represents 9.7% of total employment (890,760) for all of Puerto Rico. From this total, 7.1% require a High School Diploma or less; 26.8% an Associate's Degree, Postsecondary Non-Degree Award or Some College No Degree; 49.6% require a Bachelor's Degree; while 16.5% of these occupations require a Master's, Doctoral or Professional Degree.

Figure 53
STEM vs. Non STEM Occupations by Education Levels



Source: Occupational Employment Statistics (OES).

Table 7
Employment in science, technology, engineering, and math (STEM)
Occupational groups, 2015

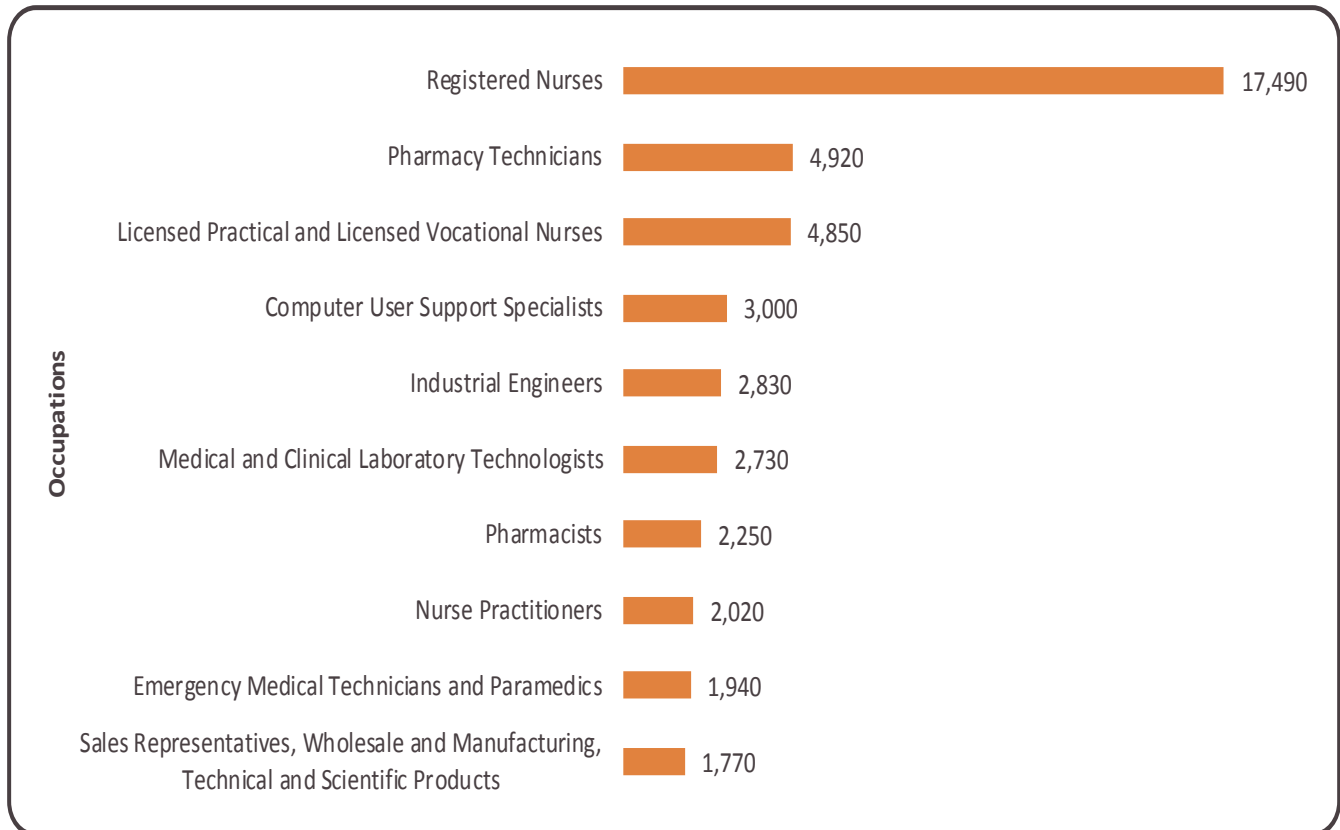
Type of occupation	MAIN				Total
	Sciences, engineering, mathematics, and information technology domain		Science– and engineering– related domain		
	SUBGROUPS		SUBGROUPS		
	a. Life and physical science, engineering, mathematics, and information technology occupations	b. Social science occupations	c. Architecture occupations	d. Health occupations	
Total	32,060	1,530	240	52,880	86,710
1. Research, development, design, or practitioner occupations	15,030	520	190	27,080	42,820
2. Technologist and technician occupations	11,600	/	/	22,570	34,170
3. Postsecondary teaching occupations	1,610	1,010	50	2,320	4,990
4. Managerial occupations	2,050	/	/	910	2,960
5. Sales occupations	1,770	/	/	/	1,770

Source: Occupational Employment Statistics (OES).

Of the 5 types of STEM Occupations, the Research, development, design, or practitioner occupations, reflect the most jobs (42,820) followed by the Technologist and Technician occupations (34,170).

The STEM Occupations with the most jobs in 2015 were Registered Nurses, Pharmacy Technicians, Licensed Practical and Licensed Vocational Nurses.

Figure 54
Top STEM Occupations with the Highest Employment Occupations, 2015



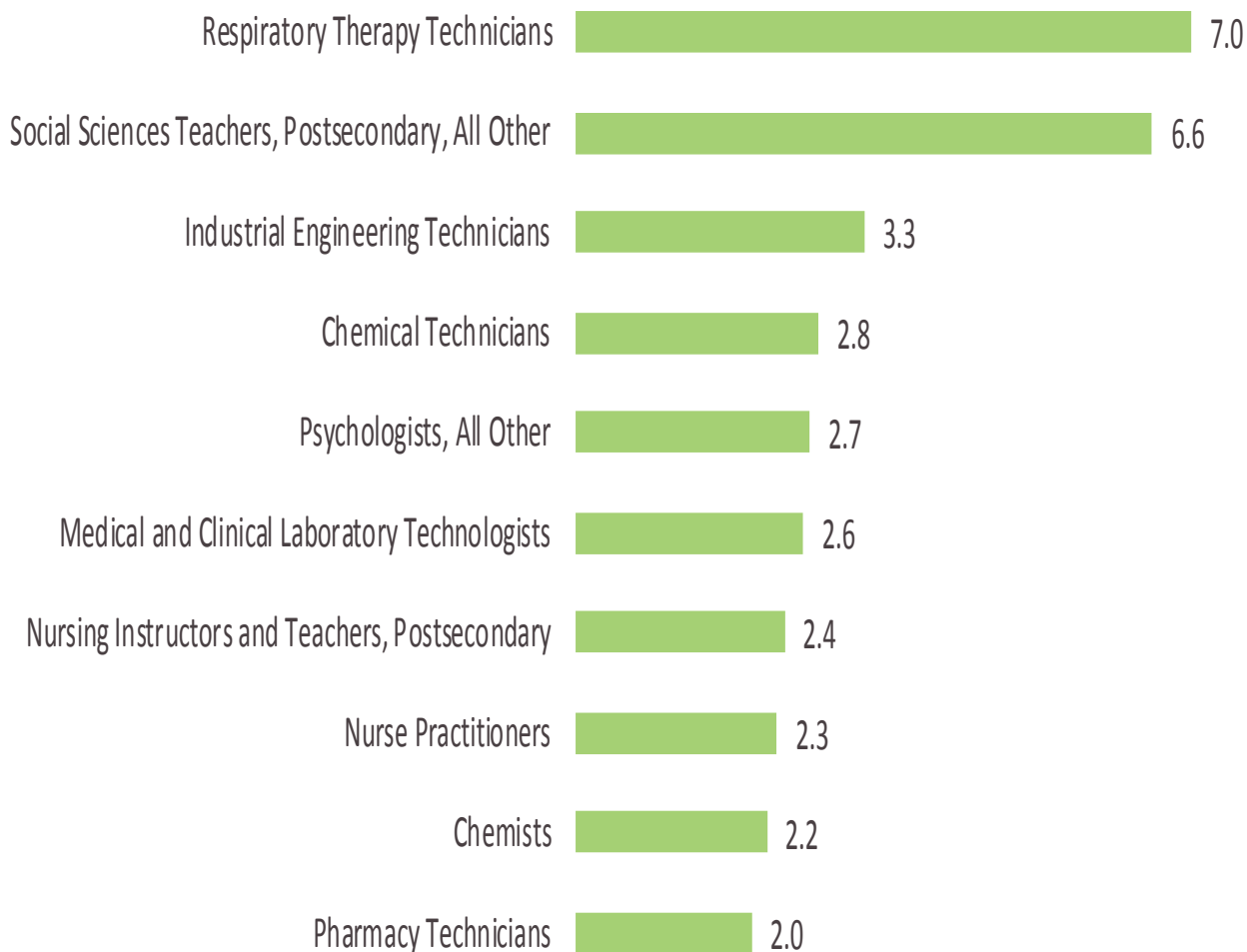
Source: Occupational Employment Statistics (OES).

According to the location quotient, private employment is concentrated mostly in Respiratory Therapy Technicians, Social Sciences Teachers, Postsecondary, All Other; and Industrial Engineering Technicians.

The location quotient is the ratio of the area concentration of occupational employment to the national average concentration.

A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

Figure 55
Top STEM Occupations with Highest Location Quotient, 2015

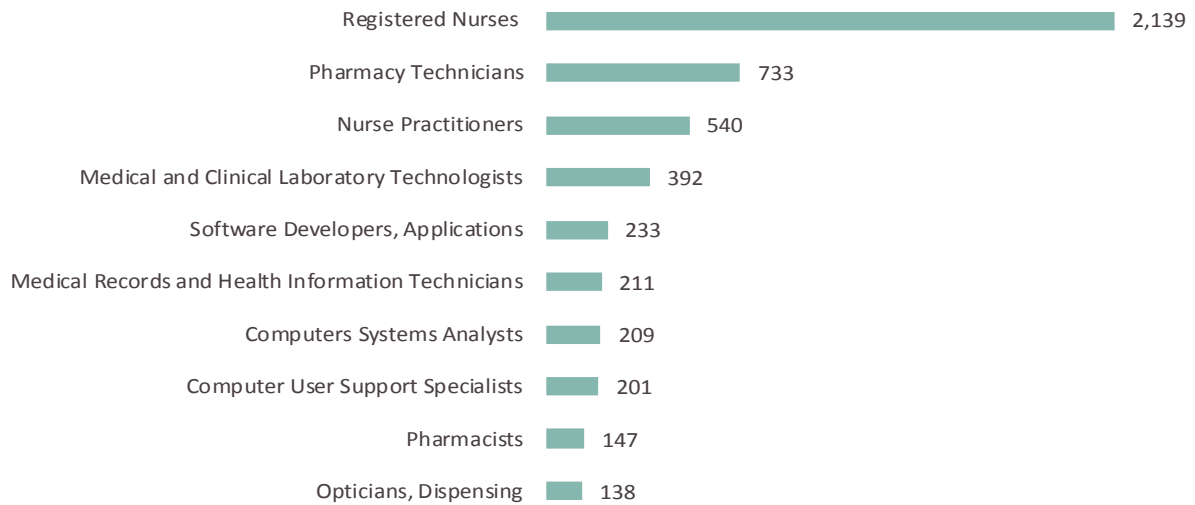


Source: Occupational Employment Statistics (OES).

B. Projections

Occupations expected to further increase in new jobs, during the period 2014-2024, are those related to health, especially: Registered Nurses (2,139), Pharmacy Technicians (733), Nurse Practitioners (540).

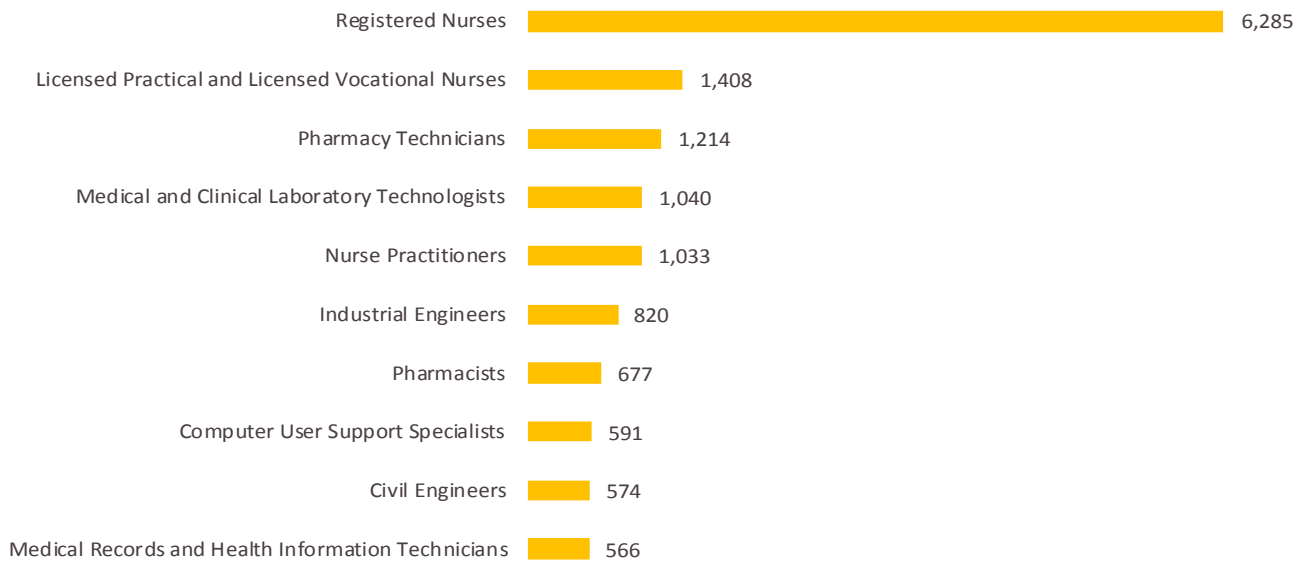
Figure 56
Top 10 STEM Occupations Gaining The Most New Jobs Projected 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.

The occupations expected to project an increase in new jobs between 2014 and 2024 are those found in health, with Registered Nurses, (6,285) being the more outstanding; Licensed Practical and Licensed Vocational Nurses (1,408); Pharmacy Technicians (1,214).

Figure 57
Top 10 STEM Occupations with Most Openings 2014-2024

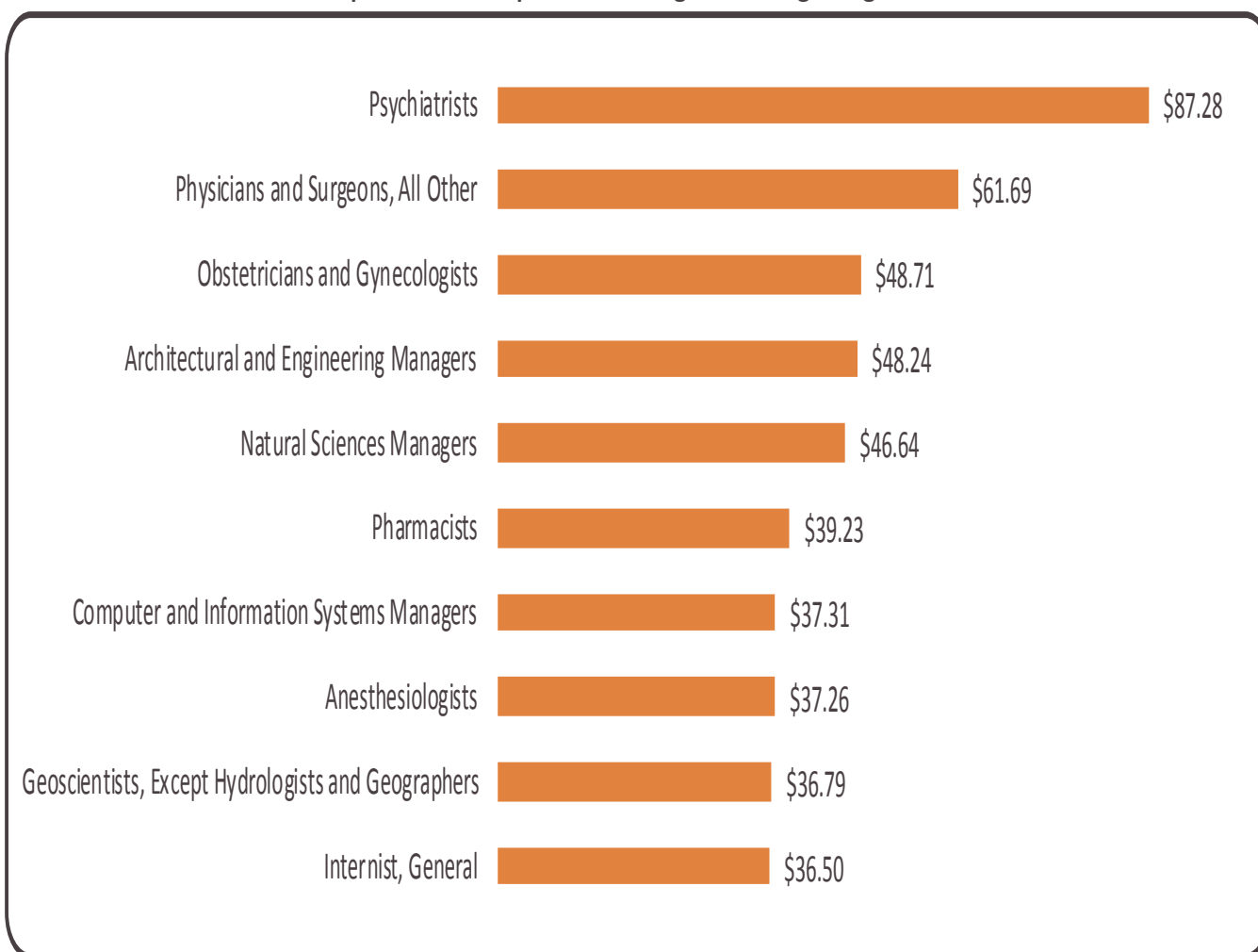


Source: Puerto Rico Department of Labor - Research & Statistic Division.

C. Wage

In May of 2015, the average hourly wage for all of these occupations in Puerto Rico was \$13.56 while STEM Occupations reached an average salary of \$23.44. Among the STEM Occupations, Psychiatrists reached the higher average salary of \$87.28 an hour, followed by Physicians and Surgeons, All Other with \$61.69 an hour.

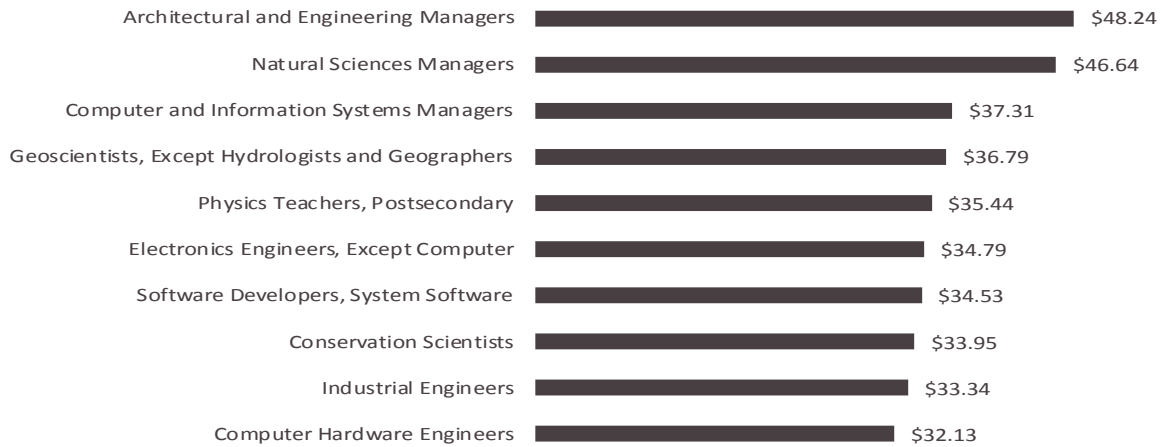
Figure 58
Top 10 STEM Occupations with Highest Average Wage 2015



Source: Occupational Employment Statistics (OES).

Within the occupations of Life and Physical Science, Engineering, Mathematics, and Information Technology, the following stand out with the highest wages: Architectural and Engineering Managers; and Natural Sciences Managers with an average wage of \$48.24 and \$46.64, respectively.

Figure 59
Top 10 Life and Physical Science, Engineering, Mathematics, and Information Technology Occupations with Highest Average Wage 2015

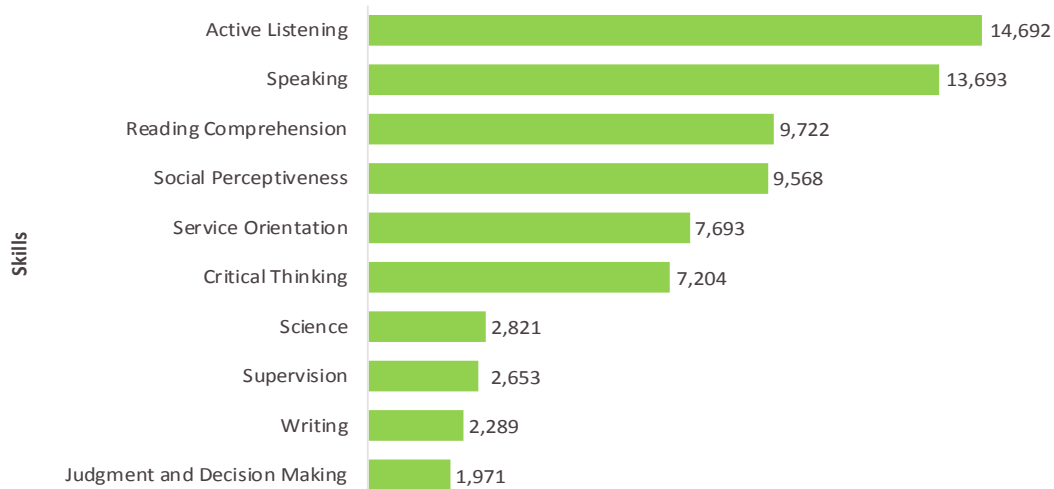


Source: Occupational Employment Statistics (OES).

D. Skills

Among the required skills in STEM Occupations, according to the 2014-2024 projections, the ability to listen or actively listen, which means to listen and understand communications from a speaking point of view; the ability to communicate verbally; to have reading comprehension and social perspectives with a concrete point of view in particular and subjective matters are what is important in today's society.

Figure 60
Skills More Required in Occupations STEM Long Term Projections 2014-2024



Source: Puerto Rico Department of Labor - Research & Statistic Division.



DEPARTMENT OF
LABOR
AND HUMAN RESOURCES
Commonwealth of Puerto Rico

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Research and Development

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